

Pease

BAY

A COMMUNITY COLLEGE

CITY

1959

1961

JUNIOR

COLLEGE

BAY CITY JUNIOR COLLEGE

CATALOGUE

1959 - 1961

A Community College
Fully Accredited by the
North Central Association
of Colleges and Secondary Schools
and
The Michigan Commission on
College Accreditation

Authorized and Controlled by the Bay City Board of Education

Bay City, Michigan

COLLEGE CALENDAR

FIRST SEMESTER

	1959-1960
Placement examinations for new students	Aug. 17, 18
Pre-registration, Evening College	Aug. 24-Sept. 11
Faculty Conference	Sept. 8, 9
Faculty Workshop	Sept. 10, 11
Conference with new students and parents	Sept. 14, 7:30 p.m.
Registration, Sophomores	Sept. 14
Registration, Freshmen	Sept. 15, 16
Registration and classes convene, Evening College	Sept. 14-19
Classes convene, Day College	Sept. 17
Thanksgiving Holiday	Nov. 26-29
Classes resume	Nov. 30
Christmas Holiday begins	Dec. 18
Classes resume	Jan. 4
Semester examinations	Jan. 20-25
First Semester ends	Jan. 30

SECOND SEMESTER

Placement examinations for new students	Date to be announced
Pre-registration, Evening College	Jan. 11-29
Registration	Feb. 1-3
Registration and classes convene, Evening College	Feb. 1-6
Classes convene, Day College	Feb. 4
Spring Vacation	April 15-24
Classes resume	April 25
Semester examinations	May 31-June 3
Commencement	June 10

SUMMER SESSION

Placement examinations for new students	June 14, 15
Summer Session begins	June 20
Summer Sessions ends	July 29

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BAY CITY BOARD OF EDUCATION

Russell F. Beck

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ADMINISTRATION

Elwyn J. Bodley
Superintendent of Schools

L. J. McCully
Business Manager—Board of Education

Lyle Ewing
Secretary—Board of Education

Eric J. Bradner
Dean of Junior College

ADMINISTRATIVE STAFF

Bradner, Eric J. Dean
Thorsberg, Walter E. Registrar
Kern, Palmer Dean of Men
Waterman, Lois L. Dean of Women
Stuart, Robert M. Director, Dept. of Continuing Education
Van Wezel, Henry J. Director, Dept. of Vocational Education

FACULTY

BRADNER, ERIC J. Dean, Principal of Bay County Normal School
B.A., Occidental College; M.A., Ph.D., Northwestern University. Additional graduate work: University of Southern California and Stanford University.

ADAMS, LORNE P. Physiology
B.A., M.A., University of Michigan. Additional graduate work: University of Michigan.

BERRY, ELIZABETH Music
B.Mus., M.Mus., Michigan State University.

BRINN, JOHN H. Mathematics
B.S., M. Ed., Murray State College. Additional graduate work: Vanderbilt University.

BURKE, BEVERLY (Mrs.) Music
B.Mus., Oberlin College. Additional graduate work: Syracuse University.

CADY, LOREN Music
A.A., Bay City Junior College; B. Mus., Oberlin College; M. Mus., University of Michigan.

CALEF, ROBERT T Biology
B.S., M.S., University of Illinois; M.A., University of Michigan. Additional graduate work: University of Illinois, Duke University, University of Michigan, Emory University, Graduate Air Force Intelligence School, Brisbane, Australia; Roscoe B. Jackson Memorial Cancer Laboratory.

CASTILLO, CHARLES W. Speech
B.A., M.A., University of Redlands. Additional graduate work: University of Colorado.

CONWAY, LYNN V Physical Education,
Basketball, Cross Country Coach
B.S., Michigan State University. Additional graduate work: Michigan State University and University of Michigan.

DEVOL, LLOYD E. Economics
B.A., M.A., Ohio State University. Additional graduate work: University of Michigan.

DOLL, LOUIS W History
B.A., M.A., Ph.D., B.A.L.S., University of Michigan; Ph.D. (Honorary), Nihon University, Tokyo. Additional graduate work: Army Intensive Japanese Language School; Military Intelligence Service Language School.

DRAKE, NED E. English
B.S., M.A., University of Southern California. Additional graduate work: University of Vienna, Austria.

ELKIN, COVA Mathematics
B.A., Western Kentucky State College; M.A., University of Kentucky.

EVANS, H. R. Music
B. Mus., University of Michigan; M. Mus., Alma College.

EWING, META M. Mathematics
B.S., M.S., Michigan State University. Additional graduate work: Michigan State University and University of Chicago.

FORTNEY, HAROLD B. Political Science, History
B.A., Fairmont State Teachers College; M.A., West Virginia University. Additional graduate work: University of Wisconsin and Ohio State University.

- FRANEK, THEOPHILE.
B.A., M.A., Western Michigan University.Shop
- FREED, SAMUEL J.Physics
B.S., Northern Michigan College of Education; M.S., University of Michigan.
Additional graduate work: Michigan State University.
- GAITSKILL, LAWRENCE R.Political Science, History
B.A., M.A., University of Kentucky. Additional graduate work: Alliance-Francaise, Paris, and University of Strasbourg, France.
- GORDON, DOUGLAS.Business
B.A., B.S., Central Michigan College; M.A., University of Michigan. Additional graduate work: Michigan State University and Western Michigan University.
- HASLIP, FLORENCE.Education
B.S., Central Michigan College of Education; M.A., University of Michigan.
- HELLMUTH, ERMA J.German, Spanish
B.A., M.A., University of Michigan. Additional graduate work: Centro de Estudios, Madrid; Centro de Estudios, Mexico; University of Buenos Aires; University of Heidelberg; Diploma de Suficiencia, Centro de Estudios Historicos, Madrid.
- HENNING, OTTOEnglish
B.S., Central Michigan College; M.A., University of Michigan.
- HEPLER, HAL W.English
B.Ed., University of Toledo; M.A., New York University.
- KERN, PALMER B.Director of Athletics, Dean of Men
Life Certificate, Central Michigan College; B.A., B.S., Western Michigan University. Additional graduate work: Michigan State University and Akron University.
- KESSLER, LIBBIELibrarian
A.A., Bay City Junior College; B.A., University of Michigan; B.S.L.S., University of Illinois.
- KLEIN, RICHARD.Economics, Sociology
B.A., M.A., Michigan State University.
- KLINGBEIL, GLADYS M. (Mrs.)History
B.A., Aberystwyth College, University of Wales; M.A., University of Michigan. Additional graduate work: University of Michigan and University of Wisconsin.
- KLOSOWSKI, GEORGIANNBusiness
B.S., Central Michigan College; M.A., Teachers College, Columbia University.
- LAGDEN, OLIVE L.French
A.A., Bay City Junior College; B.A., M.A., University of Michigan. Additional graduate work: Boston University; Western Reserve University-French School; Middlebury College-French School.
- LANGSCHWAGER, LYLE M.Geography
B.A., Central Michigan College; M.A., University of Michigan. Additional graduate work: University of Michigan.
- LEESON, GLENSwimming Coach
B.S., M.A., Western Michigan University.
- LEESON, MARJORIE M. (Mrs.)Accounting
B.S., Western Michigan University; M.A., University of Michigan.

- LONG, RUTH.English
B.S., Taylor University; M.A., University of Michigan.
- LYNCH, ALINE A.Business
B.S., Western Michigan University; M.A., University of Michigan. Three-year certificate, American Savings and Loan Institute, Chicago. Additional graduate work: University of Wisconsin and University of Michigan.
- McNALLY, EDWARD V.English, Baseball Coach
B.A., Seton Hall University; M.A., University of Minnesota.
- MORGAN, HARRIET (Mrs.)Physical Education
B.S., Central State Teachers College; M.S., University of Oklahoma.
- MUELLER, KARL H.Golf, Assistant Basketball Coach
B.S., Central Michigan College. Graduate work: University of Michigan.
- MULLIGAN, VIRGINIA J. (Mrs.)Practical Nursing
B.S.N., University of Michigan.
- OMANS, MARGARET B. (Mrs.)English
B.A., M.A., University of Michigan. Additional graduate work: Columbia University.
- PARKS, HARRY G.Political Science
B.A., Eastern Michigan College; M.A., Colorado State College; M.A., University of Michigan; M.S.Ed., Indiana University. Additional graduate work: Wayne University, Boston University, Denver University, University of Arkansas, and Graduate Army Administrative School.
- PEASE, GEORGE O.Drafting
B.S., M.S., Stout State College.
- PHILLIPS, VELMA A. (Mrs.)Nursing
R.N., Saginaw General Hospital; B.S., Eastern Michigan College; M.T (A.S.C.P.), Saginaw General Hospital.
- PLUM, KATHLEEN B. (Mrs.)Art
B.S., University of Wisconsin. Graduate work: Ecole Russe d'Art Applique, Paris; Fountainebleau School of Fine Arts, Fountainebleau, France; University of Wisconsin; Columbia University; University of Michigan; Michigan State University; Tyler School of Fine Arts, Temple University.
- PURSGLOVE, LAWRENCEChemistry
B.S., M.S., Sc.D., Carnegie Technical Institute. Additional graduate work: University of Minnesota.
- ROYAL, ADA I.Psychology
B.S., Eastern Michigan College; M.A., University of Chicago. Additional graduate work: University of Michigan, Columbia University, and University of Southern California.
- RYAN, WILLIAM A., Jr.Geology, Track Coach
B.A., Miami University; M.A., University of Missouri. Additional graduate work: University of Illinois, Washington University, and University of Michigan.
- SCHWARTZ, ARNOLD A.Drawing
A.S., Bay City Junior College; B.S.F., M.F., University of Michigan. Additional graduate work: University of Washington and University of Michigan.
- SIEHR, HUGO E.Mathematics
B.S., University of Wisconsin; M.E., Marquette University. Additional graduate work: Michigan State University.
- SMITH, EARL W.English
B.A., M.A., Ed.D., University of Michigan.

- STARR, PAUL D. Political Science
B.A., Colorado State College; M.A., Colorado University.
- STRY, EDWARD J. Chemistry
B.A., Canisius College; M.Ed., University of Buffalo. Additional graduate work: University of Buffalo, University of North Carolina, and Michigan State University.
- STUART, ROBERT M. Director Evening College
B.A., Central Michigan College; M.A., University of Michigan. Additional graduate work: University of Michigan.
- THORSBERG, WALTER E. Registrar, Mathematics
B.A., M.Ed., University of Michigan.
- UEBERHORST, LOUIS English
B.A., M.A., Ph.D., University of Michigan. Additional graduate work: Harvard University, Wayne State University, and University of Michigan.
- van BENSCHOTEN, VIRGINIA K. (Mrs.) English
B.A., Eastern Michigan College; M.A., Wayne State University; L.L.B., University of Wyoming. Additional graduate work: University of Michigan.
- VILSONS, OSKARS K. Mathematics
M.A., University of Latvia.
- WAGNER, JOHN A. Biology
B.S., Southern University; M.S., Duquesne University. Additional graduate work: Wiley College, University of Pittsburgh, University of Chicago, and Michigan State University.
- WALDRON, WILFRED R. History, Continuing Education
B.A., M.A., M.Ed., University of Michigan.
- WALKER, DOROTHY S. (Mrs.) Director of Practical Nursing
R.N., Saginaw General Hospital. Additional work: Central Michigan College and Wayne University.
- WATERMAN, LOIS L. English, Dean of Women
B.A., M.A., University of Michigan. Additional graduate work: University of Michigan; University of Wisconsin; Columbia University; and Workshop for Curriculum and Counseling, Denver, Colorado.
- WILLIAMS, FRED J. Chemistry
B.S., Michigan State University; M.A., University of Michigan. Additional graduate work: University of Chicago and Montana State College.
- WILSON, GEORGE Education, Sociology
B.A., M.A., Michigan State University. Additional graduate work: Michigan State University and University of Michigan.
- WILSON, ZANE A. Mathematics
B.A., Otterbein College; M.A., Ohio State University.
- WOODFORD, MARION L. Chemistry
B.S., Central Michigan College; M.A., Michigan State University. Additional graduate work: Michigan State University.
- WOODRUFF, ALBERT H. History
B.A., Washington and Lee College; M.A., University of Virginia.

SECRETARIAL STAFF

- Austin, Jacquelyn L. (Mrs.) Secretary
- Ceglarek, Frances E. (Mrs.) Secretary to the Registrar
- Jarvis, Thelma (Mrs.) Secretary
- Lauria, Lila M. Secretary to the Dean
- Rugenstein, Lorraine Secretary, Dept. of Continuing Education
- Siebrasse, Cordean Secretary, Library

FACULTY EMERITI

- Butterfield, George E. (1926-1949) Dean
- French, Gordon (1928-1956) Economics
- Hobbs, Ada E. (1931-1950) English
- Howe, Alice A. (1927-1945) Chemistry
- Klingbeil, Henry C. (1926-1957) Speech
- McGregor, Nellie May (1926-1954) English
- Presley, Florence (Mrs.) (1935-1950) Library
- Rogers, Fred B. (1923-1954) Physics
- Schroeder, Mathilda M. (1922-1945) German, English
- Whitney, Lola Bishop (Mrs.) (1930-1949) French

GENERAL INFORMATION

HISTORY

Bay City Junior College was established in 1922 by the Bay City Board of Education for the purpose of making the first two years of college more easily available to high school graduates of this area. As the College expanded, the residents of Bay, Saginaw, and Midland counties voted in 1957 to establish a Community College District and in 1958 voted funds for a new college. When the Tri-County College opens, Bay City Junior College will be absorbed by the new institution.

ACCREDITATION

Bay City Junior College is fully accredited by the North Central Association of Colleges and Secondary Schools and by the Michigan Commission on College Accreditation. Junior College students graduating from transfer curricula receive full credit for work done at the Junior College provided their grades are of a quality of C or better.

PURPOSE

Bay City Junior College exists for the purpose of providing an educational program beyond the high school level which prepares its students for the responsibilities of citizenship and which offers opportunities for continuing education for all residents of the area. The specific purposes of the college are as follows:

1. To provide two years of college instruction for those planning to transfer to other colleges.
2. To provide two years of general education beyond the high school level for those who wish further education for personal development.
3. To provide one and two-year business, technical, and semi-professional programs for those who wish employment at the conclusion of their Junior College training.
4. To provide courses or total programs which meet the cultural, professional, and vocational needs of the adults in the community.
5. To co-operate with other departments of the school system and with individuals, civic groups, and other institutions of higher learning in making available educational opportunities for the community.

ADVANTAGES

Bay City Junior College offers many advantages to its students.

1. **EXCELLENT ACADEMIC TRAINING** — Excellent instruction on the freshman and sophomore levels gives a good background for further college work.
2. **TECHNICAL TRAINING** — The student may receive vocational training on a level beyond that found in high school.

3. **PERSONAL INSTRUCTION AND COUNSELING** — The student may secure assistance outside the classroom from his instructors. His adviser and the deans of the college also are available to assist him. A testing program gives the student information which is helpful to him in choosing a career.
4. **PARTICIPATION IN STUDENT ACTIVITIES** — A comparatively small college gives opportunity for students to take part in extra-curricular activities.
5. **LOW EXPENSES** — The Community College is a democratic concept, for it makes available higher education regardless of the student's financial status.
6. **CONTINUING EDUCATION** — Where attendance is impossible in the Day College, education may be continued in the Evening College.

FINANCIAL INFORMATION

TUITION AND OTHER CHARGES

All charges of the College are established by the Bay City Board of Education and are subject to change by action of that body.

Matriculation Fee \$ 5.00

Every application must be accompanied by a \$5.00 deposit. If the student enrolls in the College, this amount serves as the matriculation fee, which is paid only once. If the student applies but does not enroll, the fee is forfeited.

Tuition each semester (twelve to seventeen semester hours):
Students whose legal residence is in the School District of Bay City (resident) \$ 75.00

Students whose legal residence is outside the School District of Bay City (non-resident) \$115.00

Since the formation of the Tri-County College, the Board of Trustees of that college has paid the difference between resident and non-resident tuition for those students who are legal residents of the Tri-County District.

Tuition for fewer than twelve or more than seventeen hours (each semester hour):
Resident \$ 6.00
Non-Resident \$ 9.00

Tuition for the Summer Session (each semester hour):
Resident \$ 9.00
Non-Resident \$ 13.50

Graduation Fee \$ 5.00

Placement Examination Fee:
Placement Examinations at any time other than on the dates set in the calendar \$ 5.00

Returning-Student Fee \$ 5.00

Returning students who wish to be enrolled at the College the following September must pay this fee, applied toward tuition, not later than July 1. If the student does not enter at the time indicated, the fee is forfeited.

Late Registration Fee \$ 5.00

Transcripts of Credits, each after first copy . . . \$ 1.00

Several hundred lockers are available to students who desire their use. Each locker will be made available to two students.

For those who wish lockers, the rental per year \$ 1.00

REFUNDS

Students who are obliged to leave college within the first few weeks of the semester may receive refunds of some portion of their tuition. Application for refunds must be made through the College Office and may be granted according to the following regulations:

1. No refund is granted until the student first has secured honorable dismissal from the College.
2. Refunds of tuition will be granted if withdrawal is made during the first four weeks of the semester or the first two weeks of the summer term.
3. The date of withdrawal for purpose of refund shall be the date on which application for refund is made and not the date on which class is last attended. Hence, an application for refund should be signed at once upon withdrawal. The only exception to the above shall be in cases of death or severe illness, where, upon submission of proof, a refund will be based upon the date of last attendance.

4. Schedule of refunds, regular semester:

Withdrawal	Refund
before first class session	100%
during first week	80%
during second week	60%
during third week	40%
during fourth week	20%
after fourth week	None

5. Schedule of refunds, summer term:

Withdrawal	Refund
before first class session	100%
during first week	75%
during second week	50%
after second week	None

ORGANIZATION OF THE COLLEGE

DAY AND EVENING DIVISIONS:

The College has two divisions: The Day College and the Evening College. Comparable credit courses are given in the two divisions.

THE EVENING DIVISION:

The Evening College also offers each semester a wide variety of non-credit adult education opportunities for those interested in adding to their

knowledge, competencies, and skills. Courses in gem stones, copper modeling, ceramics, millinery, beginning dressmaking, tailoring, slip-covering, swimming, life-saving, photography, and shop "Do-It-Yourself" courses are characteristic of this division.

Through both evening classes and co-ordinated home study courses, an ever-increasing number of adults are completing credits leading to a standard high school diploma. Interested adults may commence evening high school studies any Monday evening during the year with the exception of the last two weeks in August.

Community service programs are offered with the joint sponsorship of such organizations as the Bar Association, The Medical Society, Public Libraries, Junior Chamber of Commerce, Red Cross, Mental Hygiene Society, Parent-Teacher Associations, League of Women Voters, and with other community organizations.

SUMMER SESSION

A summer session of six weeks offers regular college courses for which there is sufficient demand. If possible, students should indicate their election of courses by the middle of the second semester so that the college summer program may be planned. Tuition and fees are listed on page 11.

FACILITIES

BUILDINGS

The College occupies a portion of the Central High School — Junior College building, located on Columbus Avenue. Classes also are held at Washington School, Lincoln School, the Annex, and the Y.M.C.A.

LIBRARY

The library, an attractive and well-lighted room, contains a collection of books selected to meet the requirements of the college. It subscribes to approximately one hundred periodicals and several newspapers; back files of many are available for reference.

The library is staffed by a professional librarian and an assistant. The facilities of the Bay City Public Library, the Sage Library, and in Saginaw the Hoyt Public Library also are readily accessible to college students.

LABORATORIES

The College is well equipped for work in the sciences: biology, chemistry, geology, and physics. The pre-dental, pre-medical, and engineering requirements in the various sciences are met adequately with the facilities of these modern laboratories.

CAFETERIA

A non-profit cafeteria, at which excellent lunches may be secured at reasonable prices, is available.

EDUCATIONAL GRANTS

FOR STUDENTS ATTENDING JUNIOR COLLEGE

A number of educational grants are available to Junior College students. The amounts of the grants vary, but in general twenty-five to thirty dollars each semester is awarded toward tuition payment. These are awarded primarily on the basis of need, along with satisfactory academic records. Each grant is made for one semester, renewable the following semester provided the student has maintained a satisfactory record.

Applicants for Educational Grants should contact the Chairman of the Scholarship Committee of Junior College or the Dean of the College. Application blanks also may be secured through high schools of the area. No application for financial assistance is given consideration until application for admission to the College has been completed.

SCHOLARSHIPS FOR JUNIOR COLLEGE GRADUATES

MICHIGAN STATE BOARD OF EDUCATION SCHOLARSHIPS

These scholarships have been made available for those entering teacher training at Central Michigan College, Eastern Michigan College, Western Michigan University, and Northern Michigan College. They pay tuition for one year, renewable if a satisfactory academic record is maintained.

THE UNIVERSITY OF MICHIGAN PUBLIC JUNIOR COLLEGE SCHOLARSHIPS

Each year since 1941 the University of Michigan has made available a number of scholarships to Junior College graduates. These are awarded upon the basis of scholarship, citizenship, need, and the recommendation of the Junior College Scholarship Committee. They cover tuition and fees for one year, renewable if a satisfactory record is maintained.

MICHIGAN STATE UNIVERSITY PUBLIC JUNIOR COLLEGE SCHOLARSHIPS

In 1949 Michigan State University established scholarships for Junior College graduates. These awards are based upon scholarship, citizenship, need, and the recommendation of the Junior College Scholarship Committee. They cover tuition and fees for one year, renewable if a satisfactory standard of scholarship is maintained.

MICHIGAN COLLEGE OF MINING AND TECHNOLOGY

The Michigan College of Mining and Technology awards annually a tuition scholarship to a Bay City Junior College graduate.

WAYNE STATE UNIVERSITY

Wayne State University makes available two tuition scholarships annually to Bay City Junior College.

OTHER SCHOLARSHIPS FOR JUNIOR COLLEGE GRADUATES

Many other universities and four-year liberal arts colleges award scholarships to Junior College graduates. For information contact the Dean of Men, Dean of Women, or Registrar.

STUDENT SERVICES

COUNSELING AND TESTING

The College believes that counseling services are important in helping the student achieve the greatest possible success. Hence the counseling program begins before the student registers and continues through his entire Junior College course. All students are required to take placement examinations before registering. Each student has a pre-registration conference with a counselor, who will assist him in understanding his particular abilities and in selecting courses.

At the time of registration each student is assigned an adviser, who is well-informed on the curriculum which the student has selected. The adviser will assist the student throughout his Junior College years in selecting courses needed for his specific objectives. If the student is planning to continue his education beyond Bay City Junior College, he should know which senior college he wishes to attend in order to choose the courses which will be required in transfer. Should a student be undecided concerning his plans beyond college, trained counselors are available to help him.

Students who expect to terminate their formal education at the Junior College level are encouraged to explore the courses which have been suggested by business and industry to fit them for future employment in the community.

In addition to the counseling given by the faculty advisers, the assistance of the Dean of the College, the Dean of Men, the Dean of Women, and the Registrar is available.

READING CLINIC

A Reading Improvement Clinic (listed as English 12) is designed to assist all students who wish to improve their reading speed and comprehension. Enrollment is optional.

PLACEMENT

The Dean of Men and the Dean of Women assist students in securing part-time employment. The College also co-operates in the placement of students in work for which they have been trained.

BOOKSTORE

Textbooks and supplies may be purchased at reduced rates at the college bookstore. Books cost approximately \$30.00 a semester, the amount varying with the courses elected.

MEN'S ATHLETICS

Bay City Junior College believes that sports are a medium for physical, social, and mental development. For those who participate as players or spectators, there is opportunity to observe and exemplify good sportsmanship. Since the College feels that there should be an opportunity for all to participate, a comprehensive program of intramural athletics is planned.

Intercollegiate sports give those who excel a chance to play against competitors. Teams compete in the Michigan Junior College Conference in the following sports: cross-country, basketball, swimming, golf, tennis, baseball, and track. This inter-collegiate schedule gives the college students and the community, where we are the only college, a chance to observe as spectators college teams in their favorite sports. This program also brings our players and students in contact with players and students of neighboring colleges.

WOMEN'S ATHLETICS

The women participate in intramural sports and intercollegiate contests.

ACTIVITIES

Because of the relatively small size of the College, participation in activities is made possible for all. In addition to convocations, roller-skating parties, open houses, and other student events, the College sponsors many organizations, including: Student Council, Student Social Committee, Publications, Women's League (for all college women), Women's Recreation Association, Men's Union (for all college men), Business Administration Club, Engineers' Club, Tetra Sci Club (for science students), Psychology Club, Lettermen's Club, Veterans' Club, Camera Club, Ski Club, Student Christian Fellowship, Newman Club, Political Science Club, Circle K (affiliated with Kiwanis International), County Normal Club, Journalism Club, Choir, Debate, Phi Theta Kappa (national honor society), and intercollegiate and intramural athletics.

REGULATIONS

CONDUCT OF STUDENTS

It is essential that those who enroll in Bay City Junior College realize that their success rests on their own efforts and attitude and that attendance at the College is a privilege and not a right. College students are considered to have reached the age of responsibility and discretion. Their conduct shall be that of responsible citizens.

ATTENDANCE POLICY

- 1 Attendance is expected at all classes. There is no system of cuts.
2. Courtesy demands that students explain the reasons for their absences to their instructors.
3. It is the responsibility of students to make definite arrangements for all work before going on field trips or other school-sponsored events.
4. Any student whose absences from any class exceed the number of times that class meets weekly shall stand suspended from that class. The instructor may, at his discretion, admit the student to one additional meeting of the class.
5. A student who has been suspended from class may petition the Dean for re-admission.

CONVOCATIONS

One hour of each week is reserved for convocations. Students are expected to attend all convocations, which will be called at stated intervals. Failure to attend results in disciplinary action.

RESIDENCE POLICY FOR WOMEN

All college women who are not living with relatives are required to live in residences which have the approval of the College. College women not living with relatives may not change residence during the college year without the permission of the Dean of Women.

GRADE REQUIREMENT FOR ACTIVITIES

Students with a semester grade average of less than C (2.0) may not accept offices or major chairmanships the following semester

ACADEMIC PROBATION

- 1 There is no academic probation for admission of students who come to Bay City Junior College without having first attended some other college.
2. Any student whose cumulative grade point average at the end of any semester falls below 1.5, or any student who transfers from another institution with a cumulative grade point average of less than 1.5 shall be placed on probation. Probation may not be lifted until the cumulative grade point average becomes 1.5 or higher
3. Withdrawal for academic deficiency: any student who is on probation and who fails to earn during the following semester a grade point average of 1.5 for that semester shall be asked to withdraw from the college.
4. Re-admission after withdrawal for academic deficiency: a student who has been asked to withdraw because of academic deficiency may apply for re-admission after the lapse of one semester. If he is re-admitted, this student will be admitted on probation.

CHANGE OF SCHEDULE

- 1 Students who wish to change their elections in any way whatsoever must secure permission and the proper forms from the Dean of Men or the Dean of Women. These written requests must then be approved and signed by the adviser and instructors concerned before being filed in the Registrar's office.
2. The last date for entrance into a course is the last day of the second week of the college semester.
3. Courses dropped before the completion of the fourth week of the semester will be recorded as "dropped"
4. Courses dropped after the fourth week of the semester will be recorded as dropped, with a letter grade and the notation "no credit"
5. Courses dropped within four weeks of the end of the semester will be recorded as failed.

WITHDRAWAL FROM COLLEGE

To withdraw from college the student must secure a withdrawal slip from the Dean of Men or the Dean of Women. Records for students withdrawing are handled as explained above.

CLASS LOAD

No student may elect more than 17 hours (not including physical education) without special permission from one of the Deans. He must have earned a grade point average of C+ (2.5) or better during the previous college semester or during the last semester in high school, depending upon which was more recent.

ACADEMIC INFORMATION

TYPES OF CURRICULA

Bay City Junior College has two types of curricula or programs. Before making application for admission, the student should understand the difference between these two programs, since the application blank requests a statement as to the type of curriculum desired. A student must be admitted not only to the college but also to a definite curriculum. See p. 29. The curricula are organized as follows:

ONE AND TWO-YEAR TERMINAL CURRICULA (TYPE A)

These are intended for those students who wish only one or two years of college or for those whose previous training is inadequate to allow admission to a Type B curriculum. Some of these programs are of a general nature. Others are vocational and prepare the student for a specific type of work. See p. 29

TWO-YEAR TRANSFER CURRICULA (TYPE B)

These are intended for students who plan to transfer to senior colleges. Those wishing to enroll in one of these programs of study with the intention of transferring must be graduates of accredited high schools and have earned an average of C (2.0) or better in the academic subjects. Freshmen whose high school records or transfer students whose previous college records do not satisfy the two requirements of a C average and the necessary background subjects will be placed in a Type A curriculum until such a time as they have made up all deficiencies. See p. 29. Students should be sure that their high school credits satisfy the entrance requirements of the colleges to which they plan to transfer. In this respect, special attention should be given to English, science, mathematics, and foreign languages.

ADMISSION REQUIREMENTS

FRESHMEN

All high school graduates are eligible for admission to Bay City Junior College. They will be admitted, however, only to those curricula for which they show adequate preparation and for which they have applied prior to August 15th (for the Fall Semester) or January 15th (for the Spring Semester). Students who have deficiencies in courses required for curricula of their choice will find it necessary to enroll in other curricula for which they are prepared. See p. 29 Each student is admitted not only to the College but also to a particular curriculum which fits his preparation and goal.

TRANSFER STUDENTS

Students with advanced standing are admitted to the College when it seems probable that they will profit from the Bay City Junior College program. Credits are accepted by the Junior College only from accredited institutions of higher learning.

SPECIAL STUDENTS

Adults may enroll in any Junior College class from which they can profit and for which they have the prerequisites. If credit earned in Junior College is applied toward high school graduation, it cannot be used as college credit.

TIME OF FILING APPLICATION

Incoming freshmen should make application during the second semester of their senior year. Those filing later may be at a disadvantage in their choice of courses. Transfer students should file application at the earliest possible date. No applications will be accepted after August 15. Returning students are required to file a notice of intention to return, together with a \$5.00 fee, before July 1.

ADMISSION PROCEDURE

All applicants for admission to the Day College must follow the procedure as outlined:

1. **APPLICATION BLANK AND HEALTH BLANK.** Secure an application and a health blank from the Registrar of Bay City Junior College or from the high school from which the applicant graduates. These are to be made out in full and returned by the applicant to the Registrar of the College. The health blank may be turned in later but must be on file in the College BEFORE the student enrolls. Failure to turn in the health blank results in exclusion from classes. Entering students must complete all application requirements before August 15 to be eligible for consideration.
2. **TRANSCRIPT OF CREDITS.** Request a transcript of credits from the last educational institution attended. It is the responsibility of every

freshman to see that the high school sends his credits directly to the Junior College. It is likewise the responsibility of transfer students to request that credits be sent directly from colleges attended previously. The application is NOT complete until these transcripts are on file.

3. **PLACEMENT TESTS.** Applicants are required to take placement tests, which are used in the counseling program of the college. Information concerning the times at which these tests are given may be secured through the College office. The application is NOT complete until these tests are taken.

REGISTRATION

For registration dates students are referred to the College Calendar on page 2. New students will be notified by mail when to report.

Students who wish to enroll in the Evening College will secure all necessary forms at the time of registration.

Tuition and fees must be paid in full at the time of registration. Those who register after the scheduled period are charged a \$5.00 late registration fee.

GRADUATION REQUIREMENTS

Graduation from Bay City Junior College is recognized with either a Certificate of Graduation or an Associate Degree.

CERTIFICATE OF GRADUATION

All candidates for graduation must have been in residence at this or another institution of higher education for the equivalent of at least four semesters; they must have been in residence at this college for at least the last 12 hours of their Junior College study.

All candidates for graduation must complete a minimum of sixty-two semester hours of credit to include the following:

1. A grade point average of 1.5 exclusive of Physical Education.
2. Six hours of credit in English.
3. One course in Political Science: 101, 102, or 103.
4. Two hours of credit in Physical Education (unless officially excused). When the student is excused officially, the minimum number of hours required for graduation is reduced to sixty.

ASSOCIATE DEGREES

Candidates for Associate Degrees must meet the following requirements in addition to those for the Certificate of Graduation.

1. For all degrees:
A minimum grade point average of 2.0, exclusive of Physical Education.

ASSOCIATE DEGREES Continued

2. For the Associate in Arts degree:
 - a) Successful completion of one of the transfer (type B) curricula, See p. 29
 - b) Completion of at least eight semester hours of credit from each of Group I (Humanities), Group II (Science), and Group III (Social Science) as explained below.
3. For the Associate in Science degree:
 - a) Successful completion of one of the transfer (type B) curricula, See p. 29.
 - b) Completion of at least eight hours of credit from each of Group I (Humanities) and Group III (Social Science) as explained below.
 - c) Completion of at least 20 hours of credit from Group II (Science).
4. For the Associate in General Studies degree:
 - a) Successful completion of either a terminal (type A) or transfer (type B) curriculum. See p. 29
 - b) Completion of at least 20 hours of credit from one or more areas related to the chosen curriculum.
5. For the Associate in Business Studies degree:
 - a) Successful completion of either a terminal (type A) or transfer (type B) curriculum. See p. 29.
 - b) Completion of at least 20 hours of credit in business subjects.
6. For the Associate in Engineering degree:

Successful completion of a transfer (type B) engineering curriculum. See p. 29

GROUP DISTRIBUTIONS

- | | |
|-----------|---|
| Group I | Humanities: American Literature, English Literature, Art Appreciation, Music Appreciation, Speech, French, Spanish, German. |
| Group II | Science: Biology, Chemistry, Geography*, Geology, Mathematics, Physics, Physiology, Psychology*. |
| Group III | Social Science: Economics, Geography*, History, Political Science, Philosophy, Psychology*, Sociology. |

* The courses in Psychology and Geography are included in either Group II or Group III but may not be counted in both.

GRADES AND GRADE POINTS

The following grading system is used: A, Excellent; B, Good; C, Fair; D, Poor; E, Not Passed; I, Incomplete. If an incomplete is not removed by the end of the fourth week of the semester following that in which the I was given, the grade becomes an E.

The grade point system is as follows: for each credit hour of A — 4 points; B — 3 points; C — 2 points; D — 1 point; E — no point. In averaging the over-all grade points, the number of hours of E must be included, although no grade points are allowed. Grade points for physical education are not included in the over-all average.

RECOMMENDATIONS FOR TRANSFER

In order to receive the recommendation of Bay City Junior College to a senior college, a student must have at least an average grade of C. For some senior colleges a grade of B or better is required. Grades of D are not transferable.

TRANSCRIPTS OF CREDITS

Students wishing transcripts of records should make requests a week in advance of the time they are needed. No transcripts will be made out during the registration period.

Transcripts of credits for purposes of transfer are sent directly to the institutions designated by the student. Transcripts are not official unless they bear the college seal.

A transcript will be issued only after the student has fulfilled all of his financial obligations to the College.

COLLEGE SUCCESS

The Bay City Junior College faculty believes that all students should show academic accomplishment if they are to remain in college. Students showing unsatisfactory progress are placed on probation. If the record continues to be unsatisfactory, the student is asked to withdraw from college. See p. 17

While the faculty wishes to assist the student in every way possible by individual help and counseling, the student must take the responsibility for his ultimate success. Absences from class and too heavy work programs inevitably lower academic accomplishment.

The College program is planned to occupy fully the student's time. The student must face realistically his own abilities and limitations and arrange his total schedule accordingly. If it is necessary for him to work more than ten or twelve hours weekly in addition to carrying a college program, he should reduce his academic load proportionately.

HONORS AND HONOR SOCIETY

Each semester there is issued a Dean's list, containing the names of all students who have an average of B+ (3.5) or better

Graduates who are in the upper ten per cent of the class are honored at the Annual Honors Convocation and at Commencement.

Bay City Junior College has a chapter of Phi Theta Kappa, National Junior College Honor Society. To be eligible for membership a student must (1) carry at least fifteen hours of credit, twelve of which are transferable to other colleges (2) be in the upper ten per cent of his class (3) have a B average. Members are selected on the basis of scholarship, character, citizenship, and leadership.

DISTRIBUTION REQUIREMENTS OF SENIOR COLLEGES

Every senior college to which Junior College students transfer has certain group or distribution requirements for graduation. Students should check the catalogues of the senior colleges of their choice for this information. Listed below are requirements of some of the colleges to which Bay City Junior College graduates transfer

CENTRAL MICHIGAN COLLEGE

Students in all degree programs must complete subject groupings as indicated. Bay City Junior College equivalents are as follows:

GROUP I	English, Foreign Languages, Journalism, and Speech	12 hrs.
a.	English Composition 101 102	6 hrs.
b.	Speech 125	3 hrs.
c.	Foreign Language (Liberal Arts Degree only)	8 hrs.
GROUP II	Science	18 hrs.
a.	Biological Science Biology 105, 106, 111, 121, 205, 215. Physiology 101, 103.	3 hrs.
b.	Physical Science Chemistry, Geology, Mathematics, Physics.	3 hrs.
*c.	Psychology 201, 202, 203	3 hrs.
Required on all teaching curricula leading to a degree:		
a and b	above	12 hrs.
	minimum of 3 in each	
c	above	6 hrs.
Required on all curricula except teaching, leading to a degree:		
a, b, and c	above	18 hrs.
	minimum of 3 in each	
GROUP III	Social Sciences	12 hrs.
	Economics, Geography, History, Philosophy, Political Science, Sociology	
GROUP IV	Education	
	Education — Required only on a teaching curriculum	
GROUP V	Fine Arts	
	Art, Music (Depending upon degree)	
GROUP VI	Practical Arts	
	Business, Industrial Arts (Depending upon degree)	
GROUP VII	Health and Physical Education	4 hrs.
	Physical Education	4 hrs.
	Not more than 4 hours of Physical Education will apply on any degree.	
UNGROUPE	Personnel (at C.M.C.)	1 hr.
* Psychology courses elected depend upon curriculum.		

MICHIGAN STATE UNIVERSITY

The attention of all students who plan to transfer to Michigan State University is directed to the M.S.U. plan of the Basic College. Students in all degree programs are required to complete four Basic College courses and two years of physical education.

Michigan State will accept as substitutes for the Basic Courses credits in related subjects if the grade is C or better. The Basic College Courses and the acceptable Bay City Junior College equivalents follow:

✓A. Communication Skills (Basic 111, 112, 113)

English 101, 102 and Speech 125 or 221; Engineers: Speech 101, 102.

✓B. Natural Science (Basic 181, 182, 183)

Eight semester hours divided between the biological sciences (Biology and Physiology 103) and the Physical Sciences (Chemistry, Geology, Physics).

✓C. Social Sciences (Basic 231, 232, 233)

Eight semester hours in two or more of the following groups:

I. Economics 111, 112; 201, 202. II. Geography 101, 102, 203. III. History 201, 202, 203. IV. Political Science 101, 102, 103. V. Psychology 201, 202, 203.* VI. Sociology 201, 202.

D. Humanities (Basic 241, 242, 243)

Eight semester hours in two or more of the following groups:

I. History 101, 102. II. English 223, 224, 241. III. Music 101, Art 105, 106. IV. Philosophy 210, 230.

E. Physical Education 4 hours

* Psychology courses elected depend upon curriculum to which the student transfers.

UNIVERSITY OF MICHIGAN

COLLEGE OF LITERATURE, SCIENCE, AND THE ARTS

1. English 101-102 6 hrs.
- *2. Mathematics or Philosophy — A two-semester sequence in either one 6-8 hrs.
- **3. Foreign Language equivalent to four-semester's proficiency 8-16 hrs.
4. Humanities: English 223, 224; Art 105, 106; Music 151, 152, 251, 252. A two-semester sequence in any one subject 6-8 hrs.
5. Social Science: Economics, Geography, History, Political Science, Psychology, Sociology. Work in at least two departments, including a two-semester sequence in one department. Psychology 201 and Sociology 201 constitute a sequence. (Not more than eight hours in one department to be taken in satisfaction of this requirement.) 14 hrs.
6. Natural Science: Biology, Botany, Chemistry, Geology, Physics, Zoology. Work in at least two departments, including a two-semester sequence in a laboratory course in one department 12 hrs.

A minimum of forty hours of the distribution requirements, including English Composition, completion of the foreign language requirement, eight hours in the social sciences, and eight hours in the natural sciences, must be completed within the first sixty hours of college work. While in Junior College, the student also should take courses that are prerequisites for the field of concentration he plans to enter in the junior year.

* Not required in School of Education

**Not required in Schools of Education or Business Administration

SCHOOL OF EDUCATION

1. English 101-102 6 hrs.
2. At least twelve hours of credit from each of the following groups:
 - Group I Ancient languages and literatures, modern languages and literatures, including English (other than courses 101 and 102), and Speech 221, 222.
 - Group II Botany, Chemistry, Geology, Mathematics, Physics, and Zoology.
 - Group III. Economics, Geography, History, Philosophy, Political Science, Sociology, and Psychology 201-202.

Students should check the University of Michigan School of Education catalogue for requirements for specific curricula.

FLINT COLLEGE

Students, including all on secondary education curriculum, entering the Flint College of the University of Michigan in liberal arts and sciences must complete the equivalent of four semesters' proficiency in one language.

WESTERN MICHIGAN UNIVERSITY

The attention of all students who plan to transfer to Western Michigan University is directed to the plan of Basic Studies. Students in all degree programs are required to complete four Basic Studies Courses and four hours of physical education.

Western Michigan will accept as substitutes for the Basic Courses credits in related subjects if the grade is C or better. The Basic Courses and the acceptable Bay City Junior College equivalents follow:

- A. Communication: English 101 102 6 hrs.
- B. Science: Eight semester hours in any combination of two or more of the following groups: I. Biology or Physiology 103. II. Chemistry. III. Geography (101 preferred) or Geology. IV. Physics.
- C. Social Studies: Eight semester hours in History 101, 102 or in any combination of two or more of the following: I. History 201, 202. II. Economics. III. History 102. IV. Political Science 101, 102, 103. V. Sociology 201, 202.
- D. Humanities: Need not be divided among groups. Six hours from: I. Art 105, 106. II. Music 101 III. Foreign Language (8 hours). IV. Literature (English 223, 224, 241). V. Philosophy 210, 230.
- E. Physical Education 4 hrs.
- F. Further additional General Education Courses depending upon the curriculum to which the student transfers. Consult Western Michigan University catalogue.

MAJORS AND MINORS IN SENIOR COLLEGES

In addition to distribution requirements most colleges require students to select major and minor fields of concentration. A major is a field of concentration in which the student completes the greatest number of hours, usually from twenty-four to thirty. A minor requires fewer hours, usually varying from fifteen to twenty. The number of hours in both major and minor fields is definitely prescribed by each college and varies widely among the colleges and among curricula.

In order to plan the Junior College program satisfactorily the student should be familiar with the major-minor requirements of the college to which he will transfer.

INDEX OF CURRICULA

"A" CURRICULA

One and Two-Year Terminal Curricula

These curricula are designed for those students who plan to complete their college work in one or two years. There is no guarantee that the courses in these curricula will transfer to other colleges. Students may, however, be able to use some of the credits for transfer. A student who has been accepted on a terminal curriculum but wishes to be enrolled in a program which will transfer to a senior college may change to such a transfer curriculum when he has made up course deficiencies and has a C average. Written application for admission to a transfer program should be made on a form secured from the Registrar of the Junior College and filed with him.

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"B" CURRICULA

Two-Year Transfer Curricula

These curricula are designed for those students who plan to transfer to senior colleges after their graduation from Bay City Junior College. The attention of the student is called to the fact that graduation requirements differ widely among senior colleges. It is the responsibility of the student to check with his adviser to see that the elected courses fill the requirements of the senior college of the student's choice. Work of less than C grade will not transfer.

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"A" CURRICULA**ARCHITECTURE****TECHNICAL ARCHITECTURE CURRICULUM**

This two year program is offered to provide basic training for architectural draftsmen. It is a sequence of intensive courses for specific employment.

Suggested Courses			
First Year			
First Semester		Second Semester	
English 116	3	English 117	3
Architecture 111	3	Architecture 112	3
Art 101	3	Art 102	3
Business 101	2	Drawing 120	2
Mathematics 31	4	Mathematics 32	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		16 hrs.	
Second Year			
Third Semester		Fourth Semester	
Architecture 211	3	Architecture 212	3
Art 105	3	Art 106	3
Economics 111	3	Art 108	2
Mathematics 33	3	Mathematics elective	4
Political Science 103	3	Speech 102	2
Speech 101	1	Elective	2
<hr/>		<hr/>	
16 hrs.		16 hrs.	

BUSINESS**ONE-YEAR CURRICULA**

These courses, designed especially for the student who plans to attend college for only one year, give the technical knowledge necessary for entry into the business field. Students completing this program have been placed in attractive positions. The following courses are recommended but may be changed to meet individual needs and interests.

ACCOUNTING CURRICULUM

Suggested Courses			
First Semester		Second Semester	
English 116	3	English 117	3
Accounting 111 or 112	3	Accounting 112	3
Business 101	2	or Accounting elective	
Economics 111	3	Business 121	2
Mathematics 101	3	Economics 112	3
Elective	3	Electives	6
<hr/>		<hr/>	
17 hrs.		17 hrs.	

Suggested electives: Business 251 and/or 252; 241; 131, 132, 133; 161; Physical Education.

MACHINE CALCULATION CURRICULUM

Suggested Courses

First Semester		Second Semester	
English 116	3	English 117	3
Accounting 111	3	Business 102	2
Business 101	2	Business 123	2
Business 121 and 122	4	Business 131, 132	2
Mathematics 101	3	Business 241	3
		Elective	3
	15 hrs.		15 hrs.

SECRETARIAL CURRICULUM

Suggested Courses

First Semester		Second Semester	
English 116	3	English 117	3
Accounting 111	3	Business 103	2
Business 102	2	Business 113	3
Business 112	4	Business 241	3
Speech 125	3	Electives	4
	15 hrs.		15 hrs.

Suggested electives: Business 121; 131, 132, 133; Accounting 263.

If a student has had business courses in high school, it may be possible to substitute additional electives.

TWO-YEAR CURRICULA

There are excellent positions open for Junior College graduates in business. The two-year curricula are designed to provide knowledge of business practices for business or administrative careers. As far as practicable, non-essentials are eliminated, so that all of the student's time and effort may be devoted to matters of real value to him.

ACCOUNTING CURRICULUM

Accounting is a rapidly growing and expanding profession. The two-year suggested program provides a background in accounting and related subjects which will prepare students for opportunities available in public and private accounting. An accounting background is also highly desirable for managerial and executive positions as well as for the operation of one's own business.

Suggested Courses

First Year

First Semester		Second Semester	
English 116	3	English 117	3
Accounting 111	3	Accounting 112	3
*Business 101	2	Business 161	3
Business 121	2	Economics 112	3
Economics 111	3	Elective	3
Mathematics 101	3	Physical Education	1
Physical Education	1		
	17 hrs.		16 hrs.

*Elective may be substituted upon demonstration of equivalent typing skill.

ACCOUNTING CURRICULUM Continued

Second Year

Third Semester		Fourth Semester	
Accounting 261	3	Accounting 263	3
Accounting 262	3	Accounting 264	3
Business 251	3	Business 131	1
Political Science 101, 102, or 103	4, 3	Mathematics 142	3
Speech 125	3	Business 271	3
	16, 15 hrs.	Business 241	3
			16 hrs.

GENERAL BUSINESS CURRICULUM

Some students are not interested in accounting or secretarial work as a major field of endeavor but wish to prepare themselves for other phases of business such as sales, retailing, small business ownership, or management. A sequence of courses may be set up to meet the vocational needs and interests of the individual student.

Suggested Courses

First Year

First Semester		Second Semester	
English 116	3	English 117	3
Accounting 111	3	Accounting 112	3
*Business 101 or 102	2	*Business 102	
Business 131	1	or elective	2, 3
Economics 111	3	Business 161	3
Mathematics 101	3	Economics 112	3
Physical Education	1	Physical Education	1
	16 hrs.		15, 16 hrs.

* Electives may be substituted upon demonstration of equivalent typing skill.

Second Year

Third Semester		Fourth Semester	
Business 121	2	Business 176	3
Business 251	3	Business 181	3
Economics 121	3	Business 241	3
Political Science 101	4	Business 252	3
Speech 125	3	Business 271	3
	15 hrs.		15 hrs.

SECRETARIAL CURRICULUM

There are many job opportunities for the college-trained secretary. The secretary to an executive has responsibilities beyond the necessary basic skills of stenography. This program is designed to give the student not only those skills but also a background of business and cultural education. It enables the secretary to handle those business details which do not need his employer's immediate attention. It develops imagination, resourcefulness, and a general understanding of business practices.

Suggested Courses

First Year		Second Semester	
First Semester			
English 116	3	English 117	3
Accounting 111	3	Business 102	2
*Business 101 ..	2	Business 112	4
*Business 111	4	Economics 112	3
Economics 111	3	Speech 125	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		16 hrs.	

* Electives may be substituted upon demonstration of equivalent skills.

Second Year

Third Semester		Fourth Semester	
Business 103	2	Accounting 263	3
Business 113	3	Business 114	3
Business 121	2	Business 241	3
Business 131, 132, 133	3	Business 252	3
Business 251	3	Political Science 101,	
Mathematics 101	3	102, or 103	4, 3
<hr/>		<hr/>	
16 hrs.		16, 15 hrs.	

The student who expects to obtain a position in the chemical industries will find it advantageous to take a year of college chemistry at some point in the above program.

MEDICAL SECRETARIAL CURRICULUM

There are many job opportunities for medical secretaries in hospitals, clinics, offices of physicians and dentists, insurance offices, and drug and instrument supply firms. This course is so designed that the student builds a vocabulary of medical terms and develops a background of business and cultural education which will enable her to handle the responsibilities that come to those employed in this field. Practical experience in office situations is also offered during the last year of the student's college course.

MEDICAL SECRETARIAL CURRICULUM Continued

Suggested Courses			
First Year			
First Semester		Second Semester	
English 116	3	English 117 ..	3
Biology 105 ..	3	Business 102	2
*Business 101	2	Business 112 or	
*Business 111 or		Humanities	4, 3
Humanities	4, 3	Business 121	2
Mathematics 101	3	Physiology 103	4
**Orientation to Medical		**Orientation to Public	
Office Work	$\frac{1}{2}$	Health Vocations	$\frac{1}{2}$
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 $\frac{1}{2}$, 15 $\frac{1}{2}$ hrs.		16 $\frac{1}{2}$, 15 $\frac{1}{2}$ hrs.	
Second Year			
Third Semester		Fourth Semester	
Business 103 or 113	2, 3	Accounting 111	3
Physiology 101	4	Business 131, 132	2
Psychology 201	4	Business 241	3
**Medical Laboratory		Political Science 103	3
Orientation	2	**Medical Laboratory	
**Nursing Arts	2	Orientation	2
**Field Experience	2	**Nursing Arts	2
<hr/>		<hr/>	
16, 17 hrs.		17 hrs.	

* Electives may be substituted upon demonstration of equivalent skills.

** The professional courses included in this program are constructed in cooperation with the Bay County Medical Assistants Society and the Bay County Medical Society.

ENGINEERING

TECHNICAL ENGINEERING CURRICULUM

This two-year program is offered at the request of local industry to provide intensive instruction for specific employment. The sequence of courses trains the student to perform many of the engineering duties often performed by the professional engineer. The engineering advisers may make necessary adjustments in the following curriculum to meet individual needs.

Suggested Courses

First Year			
First Semester		Second Semester	
English 116	3	English 117	3
Business 101	2	Drawing 152	3
Chemistry 103 or 111	4	Mathematics 32	4
Drawing 151	3	Physics 1	4
Mathematics 31	4	Physical Education	1
Physical Education	1		
<hr/>		<hr/>	
17 hrs.		15 hrs.	

TECHNICAL ENGINEERING CURRICULUM Continued

Second Year			
Third Semester		Fourth Semester	
Drawing 140	2	Chemistry 125	3
Drawing 251	3	Drawing 252	3
Mathematics 33	4	Mathematics elective	4
Physics 101	4	Shop 111	2
Political Science 103	3	Speech 102	2
Speech 101	1		—
	17 hrs.		14 hrs.

LIBERAL ARTS

GENERAL ACADEMIC CURRICULUM

This curriculum is designed for those who wish only a year or two of general education beyond high school or who are not qualified for a transfer program because of subject or scholastic deficiencies. Students who have enrolled in this curriculum to make up deficiencies should discuss their plans with their advisers. The student's adviser will help him choose courses in keeping with his abilities and interests. The only specific courses required for graduation from this curriculum are two semesters of English, one semester of political science, and two semesters of physical education. See pp. 21-22.

GENERAL ART CURRICULUM

This program is designed for students who are interested in the field of the creative arts as part of their general and cultural education.

Suggested Courses

First Year			
First Semester		Second Semester	
English 5 or 101	3	English 6 or 102	3
Art 101	3	Art 102	3
Art 105	3	Art 106	3
Music 101	3	Art 108	2
Speech 125	3	Political Science 101, 102, or 103	4, 3
Physical Education	1	Physical Education	1
	16 hrs.		16, 15 hrs.

Second Year

Art 109, 135, 236 are recommended, with other electives suggested from the following fields of interest: Economics 111, 112; English 223, 224, 241; Foreign Languages (French, German, Spanish); History; Music 101, 141; Physiology 101; Political Science; Psychology 201, 202, 203; Sociology 201, 202.

TECHNICAL ART CURRICULUM

This program is designed for the student interested in exploring art courses with a view to possible employment in the field of commercial or interior design.

Suggested Courses

First Year			
First Semester		Second Semester	
English 116	3	English 117	3
Art 101	3	Art 102	3
Art 108	2	Art 109	2
Business 101	2	Business 102	2
Political Science 101, 102, or 103	4, 3	Business 176	3
Physical Education	1	Drawing 120	2
	15, 14 hrs.	Physical Education	1
			16 hrs.

Second Year

Art 105, 106, 135 recommended, with electives to meet interests from the following suggested fields: Business; Drafting; Economics 111, 112; English 223, 224, 241; Psychology 201, 203; Sociology 201, 202; Speech 125.

MEDICAL AND HEALTH FIELDS

MEDICAL TECHNOLOGY CURRICULUM

This program is intended for students who will complete their training in three years. The first two years are given at Junior College. The third year is taken at a hospital or School of Medical Technology approved by the American Medical Association. No Bachelor of Science degree is earned.

Effective January 1, 1962, the entrance requirements to an AMA-approved School of Medical Technology will be increased to three years of college. Therefore, this curriculum will be discontinued at the end of the first semester, 1959-60. Thereafter, all students will be registered in the Type B curriculum (p. 65). Confer with the medical technology adviser to determine your curriculum status. A minimum grade average of C in science courses must be maintained to continue in the medical technology program.

MEDICAL TECHNOLOGY CURRICULUM

Suggested Courses

First Year			
First Semester		Second Semester	
English 5 or 101	3	English 6 or 102	3
Biology 105 or 111	3, 4	Biology 106 or 121, or Physiology 103	3, 4
Chemistry 103 or 111	4	Chemistry 112 or 117	4, 5
Mathematics 121 or Political Science 101 or 103	4, 3	Mathematics 157, 159, or elective	3
Physical Education	1	Physical Education	1
	15, 16 hrs.		15, 16 hrs.

MEDICAL TECHNOLOGY CURRICULUM Continued

Second Year		Fourth Semester	
Third Semester			
Chemistry 225 or 226 or elective	4, 3	Biology 205	4
Physics 101 or elective	4	Chemistry 222 and 223 or electives	6
Psychology 201	4	Physics 102 or elective	4
Elective	3, 6	Elective	2, 3
15, 17 hrs.		16, 17 hrs.	

Required courses: Eight semester hrs. of inorganic chemistry (Chem. 103, 111 and 112, or 117); 3 or 4 hours of either quantitative analysis (Chem. 225 or 226), or organic chemistry (Chem. 222 and 223); and 12 hours of biology.

Recommended electives: Physics, Chemistry, Biology, Mathematics, Psychology, Typewriting, Speech.

Sequence of courses:

Biology: Biology 105, 106, and 205; Biology 111, 121, or Physiology 103, and Biology 205.

Chemistry: Chemistry 103 or 111, 112, and 222 and 223. Chemistry 103 or 111, 117, and 225 or 226.

Physics: Mathematics 121 and 157 (or equivalents); Physics 101 and 102.

PRE-NURSING CURRICULUM

Some students prefer to study one year at Junior College before entering accredited hospital schools of nursing. College subjects give excellent background for the professional courses.

Suggested Courses	
First Semester	Second Semester
English 5 or 101	English 6 or 102
Biology 105 or 111	Biology 106 or
Chemistry 103 or 111	Physiology 103
Physiology 101	Chemistry 104 or 112
Physical Education	*Psychology 201
	Physical Education
15, 16 hrs.	15, 16 hrs.

* With permission of instructor.

PRACTICAL NURSING CURRICULUM

Practical Nursing is a twelve-month vocational program. It is open to both women and men between the ages of 18 and 50. The first semester extends over sixteen weeks; the second, over thirty-two weeks. Students are in classes seven hours daily. In addition, home study is necessary. New classes begin in September and February. Credits earned during this year are non-transferable. After completing the program, the student is granted a Certificate of Achievement in Practical Nursing. The graduate practical nurse is required to write State Board Examinations to receive a State License as a practical nurse.

PRACTICAL NURSING CURRICULUM Continued

First Semester		Second Semester	
Nursing 51, 52, 53, 55	8	Nursing 56, 58	6
Nutrition 51	3	Nursing 60	14
Physiology 51, 53	4		
Sociology 51	2		
	17 hrs.		20 hrs.

NATURAL RESOURCES
AGRICULTURE CURRICULUM

The following program is designed for those who wish added general education which will be particularly valuable in agricultural careers.

Suggested Courses

First Year		Second Semester	
First Semester			
English 5 or 101	3	Biology 106, 121, or	
Biology 105 or		Physiology 101	3, 4
Chemistry 103	3, 4	Business 101	2
Geography 101	4	Mathematics 101	3
Geology 101	4	Political Science 101, 102,	
Physical Education	1	or 103	4, 3
	15, 16 hrs.	Elective	3
		Physical Education	1
			15, 17 hrs.

Second Year		Fourth Semester	
Third Semester			
English 116	3	Accounting 112	3
Accounting 111	3	Business 161	3
Economics 111	3	Economics 112 or 121	3
Shop 111	2	Electives	6
Electives	4		
	15 hrs.		15 hrs.

PUBLIC SERVICE
AIR TRANSPORTATION

Many opportunities for both men and women are open in the expanding industry of Air Transportation. Advisers in Bay City Junior College can provide information regarding the various types of work for which a student may prepare and will assist in planning a suitable program of studies. Fields of opportunity include: accounting and finance, communications, engineering, general office work, flight dispatching, maintenance, meteorology, personnel, purchasing, reservations, hostessing, and supply traffic.

AIRLINE HOSTESS CURRICULUM

This may be a one or two-year course, which must be followed by short, intensive training of a few weeks either at a school operated by an airline or by one specializing in airline operations.

The following program recommended by a national airline is characteristic of suggestions made by other airlines.

AIRLINE HOSTESS CURRICULUM Continued

Qualifications:

Age: 20 to 28 inclusive
 Marital Status: Single
 Height: 5' 2" to 5' 7"
 Weight: 130 pounds maximum in proportion to height

Visual Acuity: 20/30 without corrective lenses
 Attractive appearance and personality

Suggested Preparatory Courses for Airline Hostesses:

English, Psychology, Public Speaking, Sociology
 Because of constant contact with people of all temperaments
 First Aid, Hygiene, Nurse's Aid, Physiology
 Because she is responsible for the comfort and welfare of passengers
 Home Economics

Because she serves meals and snacks

Languages

Because her passengers will be of all nationalities

Music, Art, Current Events

Because she will deal with persons of varying tastes

Geography

Because travel is her business

Physical Education

Because good health is required to pass the entrance physical examination and to carry out her duties as a flight crew member

This same airline continues as follows:

"If selected, she will attend a training school, during which time she will be furnished room, board, and classroom equipment. Upon successful completion of the training program she will be considered for employment and, if accepted, will be assigned a base station."

AIRLINE OFFICE TRAINING

There are openings for women reservationists, ticket agents, and secretaries. Students who wish to specialize in one of these branches should enroll in a business curriculum. See pp. 30-34.

SCIENCE

INDUSTRIAL CHEMISTRY CURRICULUM

This curriculum is designed for those desiring to spend only two years in the study of chemistry and related subjects before seeking employment in the chemical field. Some of these courses may not be transferable to all senior colleges.

Suggested Courses

First Year

First Semester		Second Semester	
English 5 or 101	3	English 6 or 102	3
Chemistry 103 or 111	4	Chemistry 112 or 117	4, 5
*Mathematics or other elective	4	Mathematics 151	1
Political Science 101, 102, or 103	4, 3	*Electives	6, 7
Physical Education	1	Physical Education	1

16, 15 hrs.

15, 17 hrs.

INDUSTRIAL CHEMISTRY CURRICULUM Continued

Second Year

Third Semester		Fourth Semester	
Chemistry 221 or 225	4	Chemistry 225 or 222	
Physics 101	4	and 223	4, 6
*Electives	8	Physics 102	4
	—	*Electives	6, 8
	16 hrs.		—
			15, 17 hrs.

* Students in this curriculum should elect mathematics each semester until they have completed the mathematics sequence through trigonometry (Math. 157). Other recommended electives: Biology 105, 106; Business 101, 251, 252; Drawing 101, 102, 130; Economics 111, 112; Psychology 201, 203; Shop 111; Sociology 201, 202; Speech 125.

VOCATIONAL AND INDUSTRIAL TRAINING

APPRENTICESHIP AND RELATED CURRICULA

The College offers Apprenticeship Programs in the following fields: bricklaying, carpentry, electricity, iron working, plumbing, and sheet metal working. These courses are offered in close co-operation with the Vocational Department of the Bay City Public Schools and the various Joint Apprenticeship Committees. Admission is restricted and is open only to apprentices indentured to one of these trades. The courses are numbered Bricklaying (Shop 31-36); Carpentry (Shop 41-46); Electricity (Shop 51-56); Iron Working (Shop 61-66); Plumbing (Shop 71-76); Sheet Metal Working (Shop 81-86). For further information consult the Vocational Department of the Bay City Public Schools.

Auto Mechanics (Shop 21-26); Machine Shop (Shop 17 and 18), and Tool and Die Apprenticeship (Shop 101-106) are offered to the apprentices in the trades named. Apprentices must be working in the trade to qualify for enrollment. Under certain circumstances apprenticeable draftsmen may have special courses established for them. For further information consult the Vocational Department of the Bay City Public Schools.

Shop Technology courses (Shop 13-14-15-16) are designed for upgrading employed persons. These courses are offered in sequence. Admission is secured upon application to the Vocational Department of the Bay City Public Schools or to the Evening College. For further information consult the Vocational Department of the Bay City Public Schools.

SHOP CURRICULA

Curricula for students interested in auto mechanics, welding, and machine shop will be especially designed upon application to the Vocational Department, the Evening College, or the Dean of Men of the College.

"B" CURRICULA**ARCHITECTURE AND DESIGN****ARCHITECTURE CURRICULUM****University of Michigan****Suggested Courses**

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
Architecture 101	2	Architecture 102	2
Art 101	3	Art 102	3
Mathematics 161	4	Mathematics 162	4
Physics 101	4	Physics 102	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
17 hrs.		17 hrs.	

DESIGN CURRICULUM

For students seeking careers in such fields as product design or commercial advertising there are ample opportunities. The following courses are suggested as helpful: Art 101, 102, 105, 106, 108, 109, 135. Detailed curriculum must be worked out according to the particular college to which the student plans to transfer. See distribution requirements on pp. 25-28.

LANDSCAPE ARCHITECTURE and CITY PLANNING CURRICULUM**University of Michigan****Suggested Courses**

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
Architecture 101	2	Architecture 102	2
Art 101	3	Art 102	3
Geology 101	4	Geology 102	4
Mathematics 121	3	Mathematics 159	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		16 hrs.	
Second Year		Fourth Semester	
Third Semester			
Art 135	3	Art 108	2
Biology 121	4	Art 236	3
Economics 201	3	Economics 202	3
Physics 101	4	Physics 102	4
Political Science 101	4	Political Science 102, 201, or 203	3
<hr/>		<hr/>	
18 hrs.		15 hrs.	

BUSINESS

Business Administration students prepare for business, industrial, and community leadership. Professional goals in business may be directed toward specialized areas: accounting, retailing, finance, marketing, insurance, real estate, secretarial administration, and public administration. The two-year sequence of courses provides general background, principles of business, and some of the tool subjects. A transfer student may follow various programs of specialization. The student is urged to secure the catalogue of the senior college of his choice and plan his course carefully in conference with his adviser.

BUSINESS ADMINISTRATION CURRICULA**Central Michigan College****Suggested Courses**

First Year		Second Year	
First Semester			
English 101	3	English 102	3
*Business 101 or 102	2	Business 102	2
Mathematics 121 or 159	3	Geography 101	4
Physiology 101, 103 or Biology 105	4, 3	Speech 125	3
Political Science 101, 102, or 103	3, 4	Elective in Business, Economics, or second minor	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16, 17 hrs.		16 hrs.	
Second Year		Fourth Semester	
Third Semester			
Accounting 201	4	Accounting 202	4
Business 251	3	Business 252	3
Economics 201	3	Economics 202	3
Psychology 201	4	English 223, 224, or 241	3
Elective in Business	1, 2	Elective in Business, Economics, or second minor	2, 3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16, 17 hrs.		16, 17 hrs.	

* Substitute elective if acceptable equivalent credit is presented.

See Central Michigan distribution requirements on p. 25.

Students who plan to major in Business or Economics should not elect Business 161

Students shall have a major in Business and a minor in Economics and, in addition, a second minor

BUSINESS ADMINISTRATION CURRICULA Continued

University of Detroit

Suggested Courses

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
Accounting 201	4	Accounting 202	4
*Business 101 or 102	2	Business 121	2
Foreign Language	4	Foreign Language	4
*Mathematics 121	3	Mathematics 159	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
17 hrs.		17 hrs.	

Second Year

Third Semester		Fourth Semester	
Accounting 261	3	Accounting 264	3
Business 251	3	Business 252	3
Economics 201	3	Business 271 or	
Philosophy 230	4	Speech 125	3
Political Science		Economics 202	3
102 or 103	3	Psychology 201	4
<hr/>		<hr/>	
16 hrs.		16 hrs.	

* Substitute elective if acceptable equivalent credit is presented.

Ferris Institute

Suggested Courses

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
Biology 105	3	Biology 106	3
Business 101 or 102	2	Business 121	2
Mathematics 121 or 159	3	Business 161	3
Political Science 101	4	Speech 125	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		15 hrs.	

Second Year

Third Semester		Fourth Semester	
English 116	3	Accounting 202	4
Accounting 201	4	Business 252	3
Business 181	3	Business 271	3
Business 251	3	Economics 202	3
Economics 201	3	Sociology 201 or	
<hr/>		Psychology 201	3, 4
16 hrs.		<hr/>	
		16, 17 hrs.	

BUSINESS ADMINISTRATION CURRICULA Continued

Michigan State University

Suggested Courses*

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
**Business 101 or 102	2	Business 161	3
Mathematics 121 or 159	3	*Humanities	3
Political Science 101	4	*Science	4
*Science	4	Elective	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
17 hrs.		17 hrs.	

Second Year

Third Semester		Fourth Semester	
Accounting 201	4	Accounting 202	4
Economics 201	3	Economics 202	3
*Humanities	3	*History 202	3
*Speech 125	3	*Humanities	3
Elective	3	Elective	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
17 hrs.		17 hrs.	

* See M.S.U. Basic College requirements on p. 26.

** Substitute an elective if acceptable equivalent credit is presented.

Suggested electives: Psychology 201; Geography 101, 102, 203; Mathematics 142.

University of Michigan

Suggested Courses*

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
***Business 101 or 102	2	Political Science 102	3
**Mathematics 159	3	*Science	4
Political Science 101	4	Speech 125	3
*Science	4	Elective	2, 3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
17 hrs.		16, 17 hrs.	

BUSINESS ADMINISTRATION CURRICULA Continued

Second Year		Fourth Semester	
Third Semester			
Accounting 201	4	Accounting 202	4
Economics 201	3	Economics 202	3
*Foreign Language or Humanities	4, 3	*Foreign Language or Humanities	4, 3
History 101 or 201	4, 3	History 102 or 202	4, 3
Elective	2, 3	Elective	2, 3
15, 17 hrs.		15, 17 hrs.	

* See University of Michigan distribution requirements on p. 27.

** Mathematics is required. Note prerequisites.

8 hrs. Mathematics is required or (1) a two-semester sequence of 8 hrs. in Chemistry, Physics, Biology, or Geology and (2) Mathematics 159

*** Substitute an elective if acceptable equivalent credit is presented.

Wayne State University

Suggested Courses

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
**Business 101 or 102	2	Business 161	3
*Chemistry 103, 111, Geology 101, or Physics 101	4	*Chemistry 104, 112, Geology 102, Physics 102, or Geography 101	4
**Mathematics 121	3	Mathematics 142	3
Political Science 101	4	Elective	3
Physical Education	1	Physical Education	1
17 hrs.		17 hrs.	

Second Year

Third Semester		Fourth Semester	
English 223, 224, or 241	3	English 223, 224, or 241	3
Accounting 201	4	Accounting 202	4
Business 251	3	Business 271	3
Economics 201	3	Economics 202	3
Speech 221	3	Sociology 201 or Philosophy 230	3, 4
16 hrs.		16, 17 hrs.	

* A two-semester sequence must be chosen. Biology 105 and Geography 101 constitute one sequence.

** Substitute elective if acceptable equivalent credit is presented.

Suggested electives: Business 121, 252; English 116; Humanities; Mathematics 159

BUSINESS ADMINISTRATION CURRICULA Continued

Western Michigan University

Suggested Courses*

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
**Business 101 or 102	2	Business 131 or 121	1, 2
*History 101	4	*History 102	4
**Mathematics 121	3	Mathematics 159	3
*Science	3, 4	*Science	3, 4
Biology 105 suggested		Geography 101 suggested	
Physical Education	1	Physical Education	1
16, 17 hrs.		15, 17 hrs.	

Second Year

Third Semester		Fourth Semester	
English 116	3	Accounting 202	4
Accounting 201	4	Business 271	3
Economics 201	3	Economics 202	3
Mathematics 142	3	*Humanities	3
*Political Science 102 or 103	3	Speech 125	3
Physical Education	1	Physical Education	1
17 hrs.		17 hrs.	

* See W.M.U. Basic Studies requirements on p. 28.

** Substitute elective if acceptable equivalent credit is presented.

HOTEL MANAGEMENT CURRICULUM

Michigan State University

Suggested Courses*

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
**Business 101 or 102	2	*Science	4
*Political Science 101	4	*Speech 125	3
*Science	4	*Humanities	3
*Humanities	3	Elective	3
Physical Education	1	Physical Education	1
17 hrs.		17 hrs.	

HOTEL MANAGEMENT CURRICULUM Continued

Second Year			
Third Semester		Fourth Semester	
Accounting 201	4	Accounting 202	4
Business 121	2	Business 252	3
Business 251	3	Economics 202	3
Economics 201	3	*Humanities	3
Psychology 201	4	Elective	3
Physical Education	1	Physical Education	1
<hr/> 17 hrs.		<hr/> 17 hrs.	

*See M.S.U. Basic College requirements on p. 26.

**Substitute elective if acceptable equivalent credit is presented.

EDUCATION

Students are admitted to schools of education as juniors after two years of satisfactory work in liberal arts. At Bay City Junior College the student should give attention to completing the basic distribution requirements of the senior college which he will attend. See pp. 25-28 for distribution requirements of four State colleges and universities. He also should select some of his electives in terms of the major or minor fields which he will follow. See p. 28.

English 101, 102; Speech 125 or 221; Political Science 101, 102, or 103; and Psychology 201 are basic and should be taken in Junior College. Most colleges require a full year of laboratory science: biology, chemistry, geology, or physics. Most church-related colleges, including Albion, Alma, Aquinas, University of Detroit, Hope, Kalamazoo, and Olivet require two years of foreign language or a language competency equal to two years of college study. Other colleges, including the University of Michigan, require a similar language competency for the Bachelor of Arts or Science degrees, but the degrees of Bachelor of Arts or Science in Education may be obtained without foreign language.

Students who plan to receive teaching certificates from the University of Michigan may graduate from either the College of Literature, Science, and the Arts or the School of Education. Those graduating from the College of L.S.A. must take a six-hour sequence of philosophy or mathematics and achieve a proficiency equal to two years of college work in foreign language. Those who elect to graduate from the School of Education need not fill the philosophy, mathematics, or foreign language requirements.

All secondary education majors entering the Flint College of the University of Michigan in liberal arts and sciences must complete the equivalent of four semesters' proficiency in one language.

ELEMENTARY EDUCATION CURRICULUM

Central Michigan College

Suggested Courses*

First Year			
First Semester		Second Semester	
English 101	3	English 102	3
**Art 111	3	Biology 106	3
**Biology 105	3	**Music 111	2
**Mathematics 103	3	Political Science 103	3
Elective	3	**Speech 125	3
Physical Education	1	Physical Education	1
<hr/> 16 hrs.		<hr/> 15 hrs.	

EDUCATION CURRICULA Continued

Second Year		Fourth Semester	
Third Semester			
**Geography 101	4	**Geography 102	4
Geology 101	4	Geology 102 or	
Psychology 201	4	elective	4
Sociology 201	3	Psychology 202 or 203 . . .	3
Physical Education	1	Sociology 202	3
		Elective	2
	16 hrs.	Physical Education	1
			17 hrs.

* See Central Michigan distribution requirements on p. 25.

** Required by C.M.C. on Elementary Curriculum.

ELEMENTARY EDUCATION CURRICULUM

Western Michigan University

Suggested Courses*

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
**Art 111	3	**Music 111	2
*Biology 105	3	Political Science 101,	
*Geography 101	4	102, or 103	4, 3
History 105	2	**Speech 125	3
Physical Education	1	Electives	4, 3
	16 hrs.	Physical Education	1
			17, 16 hrs.

Second Year

Third Semester		Fourth Semester	
**Geology 101	4	*History 102 or	
*History 101 or		Sociology 202	4, 3
Sociology 201	4, 3	**Psychology 202	3
**Psychology 201	4	Electives	7, 8
Electives	4, 5	Physical Education	1
Physical Education	1		15, 16 hrs.
	17 hrs.		

* See W.M.U. Basic Studies requirements on p. 28.

** Required by W.M.U. on Elementary Education Curriculum.

Recommended electives: Art 112, Biology 106, Geography 102, History, Physiology 101, Humanities.

SECONDARY EDUCATION CURRICULUM

Central Michigan College

Suggested Courses*

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
Biology 105 or		Biology 106 or	
Physiology 101	3, 4	Physiology 103	3, 4
Social Science elective	4	Political Science 103	3
Electives	3, 4	Social Science elective	4
Physical Education	1	Speech 125	3
	14, 16 hrs.	Physical Education	1
			17, 18 hrs.

Second Year		Fourth Semester	
Third Semester			
English 201, 223, or 224	3	Physical Science or	
Physical Science or		Mathematics	3, 4
Mathematics	3, 4	Psychology 202 or 203	3
Psychology 201	4	Electives	8
Electives	4, 6	Physical Education	1
Physical Education	1		15, 16 hrs.
	15, 17 hrs.		

* See Central Michigan College distribution requirements on p. 25.

Eighteen hours of science required, including 3 hours of physical science (Chemistry, Geology, Physics, or Mathematics). Students who take Biology 105-106 should not elect Physiology 101. B.S. degree requires no foreign language. B.A. degree requires 8 hours of foreign language.

SECONDARY EDUCATION CURRICULUM

Western Michigan University

Suggested Courses*

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
*Biology 105	3	*History 102 or Social	
Political Science 101	4	Science elective	4
*History 101 or Social		**Speech 125	3
Science elective	4	Elective	6
Physical Education	1	Physical Education	1
	15 hrs.		17 hrs.

EDUCATION CURRICULA Continued

Third Semester		Second Year		Fourth Semester	
*Geology 101	4	*Geology 102	4		
**Psychology 201	4	Psychology 202	3		
Electives	7, 8	Electives	7, 9		
Physical Education	1	Physical Education	1		
<hr/>		<hr/>		<hr/>	
16, 17 hrs.				15, 17 hrs.	

* See W.M.U. Basic Studies requirements on p. 28.

** Required by W.M.U. on Secondary Education Curriculum.

Recommended electives: Biology 106; Humanities, 6 hrs; Sociology 201, 202.

ELEMENTARY AND SECONDARY EDUCATION CURRICULA

Michigan State University

Suggested Courses*

First Semester		Second Semester	
English 101	3	English 102	3
Political Science 101	4	*Political Science 102	3
*Science	4	*Science	4
Elective	4	Elective	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		15 hrs.	

Third Semester		Fourth Semester	
*History 101	4	*History 102	4
Psychology 201	4	*Humanities	3
Sociology 201	3	*Speech 125	3
*Electives	4, 5	*Electives	5, 6
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16, 17 hrs.		16, 17 hrs.	

*See M.S.U. Basic College requirements on p. 26.

Psychology 202 recommended.

University of Michigan

Suggested Courses

First Semester		Second Semester	
English 101	3	English 102	3
Political Science 101, 102, or 103	4, 3	Science	4
Science	4	Social Science	4
Social Science	4	Elective	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16, 15 hrs.		16 hrs.	

EDUCATION CURRICULA Continued

Third Semester		Second Year		Fourth Semester	
English 223, 224, or 241	3	English 223, 224, or 241	3		
*Psychology 201	4	Psychology 202	3		
*Speech 221	3	Electives	9, 10		
Electives	4, 6				
<hr/>		<hr/>		<hr/>	
14, 16 hrs.				15, 16 hrs.	

* Required on U. of M. Education Curricula.

The student should note particularly that the School of Education distribution requirements are not identical with those of the College of Literature, Science, and the Arts. See p. 27

History 201, 202 recommended.

ART EDUCATION CURRICULUM

This program trains the student as a creative artist and at the same time gives him the experience required to specialize in the teaching of art at the elementary or secondary level. The specific courses must be worked out in terms of the senior college to which the student plans to transfer

Suggested Courses

First Semester		Second Semester	
English 101	3	English 102	3
Art 101	3	Art 102	3
Art 111	3	Art 112	3
Political Science 101, 102, or 103	4, 3	Electives	6
Elective	3	Physical Education	1
Physical Education	1		
<hr/>		<hr/>	
17, 16 hrs.		16 hrs.	

Second Year

See distribution requirements of colleges on pp. 25-28.

Art 105, 106, 108, 109, 135 recommended, with electives depending upon the college to which the student wishes to transfer

BUSINESS EDUCATION CURRICULA

The curricula for business teachers vary widely among the senior colleges. Courses which are required for graduation in this field in some colleges are acceptable only as electives in others. As the electives in this field are limited, the student is urged to secure the catalogue of the senior college of his choice and check the requirements with his adviser.

BUSINESS EDUCATION CURRICULA Continued

Central Michigan College

Suggested Courses

First Year

First Semester		Second Semester	
English 101	3	English 102	3
Business 102	2	Business 103	2
Mathematics 101 or 159	3	Geography 101	4
Physiology 101, 103, or Biology 105	4, 3	Physiology 101, 103, or Biology 105	4, 3
Speech 125	3	Political Science 103	3
Physical Education	1	Physical Education	1
16, 15 hrs.		17, 16 hrs.	

Second Year

Third Semester		Fourth Semester	
English 116	3	Accounting 202	4
Accounting 201	4	Business 131	1
*Business 112 or 113—Plan A or		Business 241	3
*Business 251—Plan B	3, 4	Economics 202	3
Business 121	2	Psychology 201	4
Economics 201	3	Physical Education	1
Physical Education	1		16 hrs.
16, 17 hrs.			

* Plan A is designed for those students wishing to prepare themselves to teach business subjects including shorthand. Plan B is designed for those who wish to place the major emphasis on teaching accounting.

See distribution requirements of C.M.C. on p. 25.

Students who plan to major in Business should not elect Business 161

Michigan State University

Suggested Courses*

First Year

First Semester		Second Semester	
English 101	3	English 102	3
*Biology 105, Physiology 103, Geology 101, Chemistry, Physics	3, 4	*Biology 105, Physiology 103, Geology, Chemistry, Physics	3, 4
Business 101	2	Business 102	2
Business 111 or 112	4	Business 112 or 113	4, 3
*Speech 125	3	Business 131, 132, 133	2, 3
Physical Education	1	Physical Education	1
16, 17 hrs.		15, 16 hrs.	

BUSINESS EDUCATION CURRICULA Continued

Second Year

Third Semester		Fourth Semester	
English 116	3	Accounting 201	4
Accounting 201	4	Business 121	2
Economics 201	3	Economics 202	3
*Humanities	3	Geography 101 or 102	4
Political Science 102 or 103	3	*Humanities	3
Physical Education	1	Physical Education	1
17 hrs.		17 hrs.	

* See M.S.U. Basic College requirements on p. 26.

Electives may be chosen in place of Business 101 or Business 111 if student presents equivalent credit.

Students not electing to teach shorthand may substitute Business 251, 252, 271, 241, 181, or 176.

Western Michigan University

Suggested Courses*

First Year

First Semester		Second Semester	
English 101	3	English 102	3
Business 101	2	Business 102	2
**Business 111	4	Business 112	4
*History 101	4	*History 102	4
Mathematics 101 or 159	3	Political Science 101, 102, or 103	4, 3
Physical Education	1	Physical Education	1
17 hrs.		18, 17 hrs.	

Second Year

Third Semester		Fourth Semester	
Accounting 201	4	Accounting 202	4
Business 121	2	Business 131, 132	1, 2
Economics 201	3	Economics 202	3
*Science	4	*Humanities	3
*Humanities	3	*Science	4
Physical Education	1	Physical Education	1
17 hrs.		16, 17 hrs.	

* See W.M.U. Basic Studies requirements on p. 28.

** At W.M.U. a major and/or minor may be selected from the following fields: (1) Secretarial and related business subjects, (2) Accounting and related business subjects, (3) Salesmanship, retailing and related business subjects, (4) General business and related subjects. A student may substitute other business subjects for Business 111 and Business 112.

Electives may be chosen in place of Business 101, 111 if equivalent credit is presented.

EDUCATION CURRICULA Continued

INDUSTRIAL ARTS CURRICULUM

The Industrial Arts Curriculum prepares students to teach in elementary, junior, and senior high schools. Requirements vary according to the senior college to which the student transfers. The student should study the catalogue of the senior college, but the following program is typical.

Suggested Courses

First Year

First Semester		Second Semester	
English 101	3	English 102	3
Drawing 101 or 151 . . .	3	Drawing 102 or 152 . . .	3
Political Science 101	4	Political Science 102 . . .	3
Science	4	Science	4
Physical Education	1	Shop 111	2
		Physical Education . . .	1
	15 hrs.		16 hrs.

Second Year

Third Semester		Fourth Semester	
Drawing 140 or 251	3, 2	Drawing 252	3
History 101 or 201	4, 3	History 102 or 202 . . .	4, 3
Humanities	3	Humanities	3
Electives	4, 6	Electives	4, 6
Physical Education	1	Physical Education . . .	1
	15, 17, hrs.		15, 17 hrs.

This program presupposes a social science minor

MUSIC EDUCATION CURRICULUM

This curriculum is designed for students who expect to teach music in the public schools after completing two more years of college elsewhere. They should elect Music 151, 152, 251, and 252 as well as certain applied music courses. Students intending to transfer to Michigan State University must complete the Basic requirements of that College. For distribution requirements of Michigan State University, Western Michigan University, Central Michigan College, and University of Michigan see pages 25-28.

Students should consult the bulletins of the schools to which they expect to transfer for details of their specific programs.

PHYSICAL EDUCATION CURRICULUM

The curriculum for physical education teachers in the secondary schools follows rather closely the curriculum outlined for other secondary teachers. See pp. 50-52. Care must be taken, however, in selection of majors and minors, as many of the courses required the last two years in senior colleges will be devoted to physical education. The major and minor requirements differ among various colleges. See pp. 25-28 for distribution requirements of colleges. The student intending to transfer to Central Michigan College should plan his work so as to secure a minor in a subject matter area outside the field of Physical and Health Education.

SPECIAL EDUCATION CURRICULUM

Teachers of special education are trained to teach exceptional children. Such teachers are specialists in the problems of the physically handicapped (including the deaf, blind or partially blind, and speech defectives), the socially maladjusted, and the mentally handicapped.

Any student who desires to teach exceptional children after completing two additional years of college should consult the catalogue of the school to which he intends to transfer and should plan carefully his first two years of work with his adviser. See pages 25-28; 48-52 for helpful information.

ENGINEERING

GENERAL ENGINEERING CURRICULUM

The entering engineering student must present acceptable high school credits in chemistry and physics, and three units in mathematics, including one and one-half units of algebra and one and one-half units of geometry. In addition, one-half unit of trigonometry is advised; if not offered for admission, it must be elected the first semester at Junior College. A student who does not meet the minimum requirements must register in the general academic curriculum. When he has removed all deficiencies, he may apply for transfer to the Engineering Curriculum.

The engineering advisers may make necessary adjustments in the following curricula to meet the requirements of other colleges or special fields of engineering.

University of Michigan

Suggested Courses

First Year

First Semester		Second Semester	
English 101	3	English 102	3
Chemistry 115 or 125 . . .	5, 3	Chemistry 125 or 115 . . .	3, 5
Drawing 101	3	Drawing 102	3
*Mathematics 151	1	*Mathematics 151	1
Mathematics 159 or 161 . . .	3, 4	Mathematics 161 or 162 . . .	4
Speech 101	1	Speech 102	2
Physical Education	1	Physical Education	1
	15, 18 hrs.		17, 19 hrs.

Second Year

Third Semester		Fourth Semester	
Economics 201	3	Economics 202	3
Mathematics 162 or 213 . . .	4	Mathematics 213 or 214 . . .	4
Physics 201	5	Physics 202	5
Political Science 103	3	Physics 205 or 210 . . .	3, 5
	15 hrs.		15, 17 hrs.

* May be taken either first or second semester.

This program with minor changes suitable also for Wayne State University and the University of Detroit.

ENGINEERING CURRICULA Continued

Michigan College of Mining and Technology

Suggested Courses

First Year

First Semester		Second Semester	
English 101	3	English 102	3
Chemistry 111	4	Chemistry 117	5
Drawing 101	3	Drawing 102	3
Mathematics 159 or 161	3, 4	Mathematics 161 or 162	4
Shop 111	2	Mathematics 151	1
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16, 17 hrs.		17 hrs.	

Second Year

Third Semester		Fourth Semester	
Economics 201	3	Economics 202	3
Mathematics 162 or 213	4	Mathematics 213 or 214	4
Physics 201	5	Physics 202	5
Political Science 103	3	Physics 205 or 210	3, 5
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		16, 18 hrs.	

Michigan State University

Suggested Courses*

First Year

First Semester		Second Semester	
English 101	3	English 102	3
Chemistry 115	5	Mathematics 151	1
Drawing 101	3	Mathematics 161 or 162	4
Mathematics 159 or 161	3, 4	*Speech 102	2
*Speech 101	1	Electives	6
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16, 17 hrs.		17 hrs.	

Second Year

Third Semester		Fourth Semester	
*Economics 201	3	*History 105	2
Mathematics 162 or 213	4	Mathematics 213 or 214	4
Physics 201	5	Physics 202	5
*Political Science 103	3	*Physiology 103	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
16 hrs.		16 hrs.	

* This program includes subjects which will meet three of the four requirements for the Basic College of Michigan State University. See p. 26. Students must spend at least one summer and two years at M.S.U. to complete this engineering program.

HOME ECONOMICS

Programs in Home Economics are offered at a number of colleges in Michigan as well as outside the State. Students interested in this field should confer with their adviser concerning offerings available at various colleges.

Michigan State University

In addition to the M.S.U. Basic College requirements (see p. 26), all Home Economics programs require Biology 111, Sociology 201, and a course in economics.

Additional courses recommended vary with the major

HOME ECONOMICS TEACHING

To prepare for teaching homemaking in both reimbursed and non-reimbursed schools in Michigan. Courses applying to this major, in addition to those listed for all majors, are:

Chemistry 111, 112

Chemistry 222 if Chemistry minor is desired

Economics 111

History 201, 202 and Political Science 101, 102 for social science minor

Psychology 201, 202

CHILD DEVELOPMENT AND TEACHING

To prepare for teaching in nursery schools, kindergartens, and primary schools of Michigan. Courses applying to this major, in addition to those listed for all majors, are:

Economics 111

Psychology 201, 202

Physiology 103

English 223, 224, 241 and Speech 221 and/or 222 will count toward English and Speech minors for Elementary Certification.

FOODS

To prepare for the profession of commercial worker in foods and nutrition, worker in experimental foods, and writer for women's magazines. Courses applying to this major, in addition to those listed for all majors, are:

Chemistry 111, 112, 222, 223

Economics 201

Psychology 201, 202

Suggested electives:

Speech

Elementary Physics 101, 102

English 201

Accounting 111, 112 or 201, 202

HOME ECONOMICS Continued

NUTRITION

To prepare for advanced work in dietetics in a hospital, clinic, or large food service unit. Courses applying to this major, in addition to those listed for all majors, are:

Chemistry 111, 112, 222, 223
 Psychology 201, 202
 Economics 201, 202
 Physiology 103
 Accounting 111 or 201

INSTITUTIONAL ADMINISTRATION

To train for managerial positions in school lunchrooms, college cafeterias and residence halls, tearooms, restaurants, and industrial food services. Courses applying to this major, in addition to those listed for all majors, are:

Psychology 201
 Chemistry 111, 112
 Economics 201, 202
 Accounting 111 or 201

CLOTHING AND TEXTILES — RETAILING

To train for positions in fashion, merchandising, display, promotion, and personnel in retail stores. Courses applying to this major, in addition to those listed for all majors, are:

Psychology 201, 202, 203
 Economics 111, 112 or 201, 202
 Business 271

RELATED ART — HOME FURNISHINGS

To train for work in the field of Interior Design in retail stores or design studios. Courses applying to this major, in addition to those listed for all majors, are:

Psychology 201, 202, 203
 Economics 111, 112 or 201, 202
 Art 101, 102, 108, 109

HOME ECONOMICS EXTENSION

To train for work as County Home Demonstration Agent in working with homemakers and youth groups. Courses applying to this major, in addition to those listed for all majors, are:

Chemistry 111, 112
 Economics 111
 Psychology 201, 202

OTHER MAJORS in Home Economics include: General Home Economics, with Journalism minor, Research in Foods and Nutrition, General Clothing and Textiles, Dress Design, Textiles. For information about these majors consult Michigan State University catalogue and adviser.

LIBERAL ARTS

GENERAL ACADEMIC CURRICULUM

The Liberal Arts Curriculum has a two-fold purpose: It is designed to provide either a general, liberal education or the necessary cultural background for certain specialized fields such as medicine, journalism, education, library science, and law. The basic requirements for most of the major fields of specialization can be met by enrolling in a liberal arts program.

Since senior institutions have different basic requirements, the student should check carefully to make sure that his program satisfies the requirements of the senior college or university of his choice. See pp. 25-28 for the basic requirements of the University of Michigan, Michigan State University, Central Michigan College, and Western Michigan University. In general, a liberal arts program follows the pattern given below.

Suggested Courses			
First Year		Second Year	
English 101, 102	6	*Foreign Language	8
*Foreign Language ..	8	Literature or Speech	6
Mathematics or Science ..	8	Electives	16
Social Sciences . .	8		
Physical Education . .	2		
			30 hrs.
			32 hrs.

* Students are advised to check the language requirements of the degree-granting school to which they will transfer

As electives students should select some courses which will be of value to them in areas of future specialization.

PRE-JOURNALISM CURRICULA

Michigan State University

The Michigan State University catalogue of 1958-59 states that "the philosophy of journalism education at Michigan State University stresses background education for journalism which includes the sciences, social sciences, literature, and other non-journalism fields. Instruction is given in journalistic techniques, but this is secondary to instruction in arts and sciences." A Junior College program similar to the following will prepare a student for transfer to Michigan State University. It combines Basic College requirements and background courses.

Suggested Courses*			
First Semester		Second Semester	
English 101 ..	3	English 102	3
*History 101	4	*History 102	4
Political Science 101 . .	4	Political Science 102 . .	3
*Science	3, 4	*Science	3, 4
Physical Education	1	Elective	2, 3
		Physical Education	1
	15, 16 hrs.		16, 18 hrs.

JOURNALISM CURRICULA Continued

Second Year		Fourth Semester	
Third Semester			
Economics 111 or 201	3	Economics 112 or 202	3
*Humanities	3	History 202, 207, or 211	3, 2, 4
History 201	3	*Humanities	3
Sociology 201	3	Psychology 201	4
*Speech 125	3	Elective	3, 5
Physical Education	1	Physical Education	1
	16 hrs.		16, 17 hrs.

* See M.S.U. Basic College requirements on p. 26.

Students planning to go into reporting or editorial work should take at least two semesters of a foreign language.

University of Michigan

The first two years of the journalism program at the University of Michigan includes courses to meet distribution requirements of the College of Literature, Science, and the Arts plus elections in the social sciences.

Suggested Courses*

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
*Foreign Language	4	*Foreign Language	4
*Science	4	*Science	4
Political Science 101 or 102	4, 3	Political Science 101, 201, or 203	4, 3
Physical Education	1	Physical Education	1
	16, 15 hrs.		16, 15 hrs.

Second Year		Fourth Semester	
Third Semester			
*Mathematics or Philosophy	3, 4	*Mathematics or Philosophy	3, 4
*Foreign Language	4	*Foreign Language	4
Economics 201	3	Psychology 201	4
History 101	4	History 102	4
Speech 221	3		
	17, 18 hrs.		15, 16 hrs.

* See U. of M. distribution requirements on p. 27

PRE-LAW CURRICULUM

Admission requirements vary among law schools; the student is therefore advised to secure the catalogue of the law school of his choice and check the requirements carefully. A suggested program such as the following generally will meet the requirements of the first two years.

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
History 101	4	History 102	4
Laboratory Science	4	Laboratory Science	4
Elective	3, 4	Elective	3, 4
Physical Education	1	Physical Education	1
	15, 16 hrs.		15, 16 hrs.

Second Year		Fourth Semester	
Third Semester			
Economics 201	3	Economics 202	3
History 201	3	History 202 or 211	3, 4
Political Science 101	4	Mathematics or elective	3, 4
Mathematics or elective	3, 4	Electives	6, 7
Elective	3		
	16, 17 hrs.		15, 16 hrs.

Suggested electives: English 201, 223, 224, 241; Foreign Language; Geography 101, 102; Political Science 201, 203; Psychology 201, 203; Sociology 201, 202; Speech 221, 222, 223.

LIBRARY SCIENCE CURRICULUM

The study of library science offers opportunities in a variety of fields such as college and university, county, public school, and special libraries. While technical courses in library science usually are not offered before the junior year, the first two years of college study in liberal arts are an important period in preparation for librarianship. See Liberal Arts on p. 60. The student should have some knowledge of foreign language, preferably French and German, and the ability to use the typewriter. It is of utmost importance that the student talk with his adviser in order to meet the distribution requirements of the senior college to which he plans to transfer. The distribution requirements of Michigan State University, Western Michigan University, University of Michigan, and Central Michigan College may be found on pp. 25-28.

MEDICAL AND HEALTH FIELDS

PRE-DENTAL CURRICULUM

Requirements for admission to a school of dentistry include at least two years (60 semester hours) of pre-dental work. In no case is a student recommended from this college who has an average of less than C+ (2.5) grade.

A student planning to enter dentistry should contact the dean of the dental school for which he is making application no later than one year before expected date of enrollment.

All applicants for dental school are required to take the National Dental Aptitude Test. Information on this examination may be secured from the Aptitude Test Division, Council on Dental Education, American Dental Association, 222 East Superior Street, Chicago, Illinois. It is advisable to take this test at an early date.

UNIVERSITY OF MICHIGAN

Suggested Courses

First Year		Second Semester	
First Semester			
English 101 . . .	3	English 102 . . .	3
Biology 111 . . .	4	Biology 121 . . .	4
Chemistry 111 . . .	4	Chemistry 112 . . .	4
Elective . . .	4	Elective . . .	4
Physical Education . . .	1	Physical Education . . .	1
<hr/>		<hr/>	
16 hrs.		16 hrs.	
Second Year		Fourth Semester	
Third Semester			
Physics 101 . . .	4	Chemistry 222, 223 . . .	6
Electives . . .	11	Physics 102 . . .	4
<hr/>		Electives . . .	5
15 hrs.		<hr/>	
		15 hrs.	

While there are not other specific subject requirements, the following are suggested electives: English Literature, Foreign Language, History, Political Science, Economics, Sociology, Mathematics, Speech, Philosophy, Psychology, and Fine Arts. This program is identical with that recommended by the University of Detroit and by Marquette University.

DENTAL HYGIENE CURRICULUM

University of Michigan

Four-Year Degree Program

Candidates must complete with satisfactory grades sixty hours of college credit on a program that would admit them to a field of concentration leading to a degree in the College of Literature, Science, and the Arts. See p. 27 for distribution requirements. In this pre-professional training the following subjects should be included: Psychology 201; Sociology 201,

DENTAL HYGIENE CURRICULUM Continued

202; Biology 111; Chemistry 111 if high school chemistry grade was not A or B. It is desirable that a candidate have some practical experience as an assistant in a dental office before enrolling in dental hygiene at the University. Typewriting and bookkeeping are not required for entrance credit, but it is urged that students who do not have a working knowledge of these subjects enroll for these courses during the summer.

Two-Year Course

Some students choose to attend Bay City Junior College for one year before entering the two-year University Dental Hygiene program. Their chances of being accepted and of succeeding in it are considerably enhanced because of their added maturity and training.

Admission to these programs is limited, and a personal interview with the Director of the Dental Hygiene program of the University is required.

PRE-MEDICAL CURRICULA

University of Michigan

Ninety semester hours of pre-medical work are required for admission to all medical schools. Sixty semester hours may be taken at Junior College. Many students seek admission to the Medical School after graduation from the College of Literature, Science, and the Arts. See University of Michigan distribution requirements on p. 27.

Suggested Courses

First Year		Second Semester	
First Semester			
English 101 . . .	3	English 102 . . .	3
Biology 111 . . .	4	Biology 215 or elective . . .	4
Chemistry 103 or 111 . . .	4	Chemistry 112 or 117 . . .	4, 5
*Foreign Language or elective . . .	4	*Foreign Language or elective . . .	4
Physical Education . . .	1	Physical Education . . .	1
<hr/>		<hr/>	
16 hrs.		16, 17 hrs.	
Second Year		Fourth Semester	
Third Semester			
Chemistry 221 or 225 or elective . . .	4	Chemistry 222 or elective . . .	4
*Foreign Language or Political Science 101 . . .	4	Chemistry 223 or elective . . .	2
Mathematics 157 or elective . . .	3	*Foreign Language or Social Science . . .	4
Physics 101 or elective . . .	4	Mathematics 159 or elective . . .	3
<hr/>		Physics 102 or elective . . .	4
15 hrs.		<hr/>	
		17 hrs.	

*Foreign Language requirements: sufficient to reach proficiency equivalent to level of four semesters of a language.

Philosophy may be substituted for mathematics.

The University recommends that Physics 101 and 102 or Chemistry 222 and 223 or Biology 215 be deferred until the third year.

PRE-MEDICAL CURRICULA Continued

Wayne State University

Suggested Courses

First Year		Second Year	
First Semester			Second Semester
English 101	3	English 102	3
Biology 111	4	Biology 215 or elective	4
Chemistry 103 or 111	4	Chemistry 117	5
Foreign Language or elective	4	Foreign Language or elective	4
Physical Education	1	Physical Education	1
	<hr/> 16 hrs.		<hr/> 17 hrs.
Second Year		Third Semester	
			Fourth Semester
Chemistry 225	4	Chemistry 222	4
Mathematics or elective	3, 4	Chemistry 223 or elective	2
Physics 101 or		Physics 102 or	
Foreign Language	4	Foreign Language	4
Political Science 101		Social Science	4
or 102	4, 3	Elective	4
	<hr/> 15, 16 hrs.		<hr/> 16, 18 hrs.

MEDICAL TECHNOLOGY CURRICULUM

This program is intended for students who will transfer to a senior college after completing two years at Junior College. Effective January 1, 1962, the entrance requirements to a School of Medical Technology approved by the American Medical Association will be increased to three years of college. Therefore, at the beginning of the second semester, 1959-60, all entering medical technology students will be enrolled in this curriculum. Transferring students will complete a third year at the senior college and a fourth year at an AMA-approved School of Medical Technology or will complete an additional two years in a Bachelor of Science degree program. A minimum grade average of C in science courses must be maintained to continue in the medical technology program.

Suggested Courses

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
Chemistry 103 or 111	4	Chemistry 112 or 117	4, 5
Foreign Language or		Foreign Language or	
elective	4	elective	4
Mathematics 121 or		Mathematics 157, 159,	
elective	3	or elective	3
Physical Education	1	Physical Education	1
	<hr/> 15 hrs.		<hr/> 15, 16 hrs.

MEDICAL TECHNOLOGY CURRICULUM Continued

Third Semester		Second Year	
			Fourth Semester
Biology 111	4	Biology 205	4
Chemistry 225 or		Chemistry 222 and 223 or	
elective	4	elective	6
Foreign Language or		Foreign Language or	
elective	4	elective	4
Political Science 101	4	Elective	3
	<hr/> 16 hrs.		<hr/> 17 hrs.

Required courses: Eight semester hours of inorganic chemistry (Chem. 103, 111 and 112, or 117); 3 or 4 hours of either quantitative analysis (Chem. 225 or 226) or organic chemistry (Chem. 222 and 223); and 12 hours of biology.

Recommended electives: Physics, Chemistry, especially quantitative analysis, Biology, Mathematics, Psychology, Typewriting, and Speech. Foreign language requirements vary with different senior colleges and may be recommended only where required for graduation in a Bachelor of Science degree program.

Sequence of courses:

Chemistry: Chemistry 103 or 111, 112, and 222 and 223. Chemistry 103 or 111, 117 and 225 or 226.

Physics: Mathematics 121 and 157 or equivalents; Physics 101 and 102 or General Physics, minimum of one semester, at a senior college.

MORTUARY SCIENCE CURRICULUM

Mortuary Science includes both embalming and funeral directing. A license to practice Mortuary Science is required in Michigan. The Michigan State Board of Mortuary Science has set educational requirements which must be met before a license can be granted. These educational requirements include 60 semester hours of academic college work. Thirty of the 60 semester hours must be taken in definitely specified subjects. Thirty semester hours may be taken from suggested electives. The following program satisfies these requirements. It follows the program outlined by the Department of Mortuary Science at Wayne State University.

Wayne State University

Suggested Courses

First Year		Second Semester	
First Semester			
English 101	3	English 102	3
Biology 111	4	Chemistry 104 or 112	4
Chemistry 103 or 111	4	Mathematics 101	3
Political Science 101, 102,		*Physiology 103	4
or 103	4, 3	Physical Education	1
Physical Education	1		<hr/> 15 hrs.
	<hr/> 16, 15 hrs.		

MORTUARY SCIENCE CURRICULUM Continued

Third Semester		Second Year		Fourth Semester	
*Accounting 111 or 201	3, 4	*Biology 215	...	4	
*Economics 111 or 201	3	*Business 161	...	3	
*History 201 or 202	3	*Chemistry 222	...	4	
Psychology 201	4	*English 223 or 241	...	3	
*Speech 125 or 221	3	Elective	...	2, 3	
<hr/>		<hr/>		<hr/>	
16, 17 hrs.				16, 17 hrs.	

* These courses are recommended but others may be elected in their places.

NURSING CURRICULA

Michigan State University
Four-Year Degree Program
Suggested Courses*

First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 205	4
Chemistry 111	4	Chemistry 112	4
*Political Science 101	4	*Psychology 201	4
Physical Education	1	*Speech 125	3
<hr/>		Physical Education	1
16 hrs.		<hr/>	
		19 hrs.	

* These courses fill three of the four Basic College requirements of M.S.U.
See p. 26.
Students must transfer after one year at Bay City Junior College.

University of Michigan and Wayne State University
Four Year Degree Program
Suggested Courses

First Semester		Second Semester	
English 101	3	English 102	3
Chemistry 111	4	Chemistry 112	4
Sociology 201	3	Psychology 201	4
Electives in Humanities and/or Social Sciences	6	Electives in Humanities and/or Social Sciences	.5, 6
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
17 hrs.		17, 18 hrs.	

See University of Michigan distribution requirements p. 27.
Students must transfer after one year at Bay City Junior College and begin work the following summer at the University of Michigan or Wayne State University.

OCCUPATIONAL THERAPY CURRICULUM

Students may transfer at the end of two years at Bay City Junior College and after two more years receive both the Occupational Therapy Diploma and the degree of Bachelor of Science. Degrees with a major in Occupational Therapy are offered at a number of schools within the State.

Western Michigan University

Suggested Courses*

First Semester		Second Semester	
English 101	3	English 102	3
Art 111	3	Art 112	3
*Biology 111	4	Biology 121	4
*Political Science 101	4	Music 111	2
Physical Education	1	Elective	2, 3
<hr/>		Physical Education	1
15 hrs.		<hr/>	
		15, 16 hrs.	

Third Semester		Fourth Semester	
*Art 105	3	Art 108	2
*Geography 101	4	Biology 215	4
*Humanities	3	*Psychology 201	4
*Sociology 201	3	*Electives	6
*Speech 125 or 221	3	Physical Education	1
Physical Education	1	<hr/>	
<hr/>		17 hrs.	

* See W.M.U. Basic Studies requirements on p. 28.
Eastern Michigan College suggests deferring Biology 215 until the Junior year and electing History 101, 102 at Junior College.

PRE-OPTOMETRY CURRICULUM

The requirements for admission to schools and colleges of optometry are varied. Typically, they include courses in English, mathematics, physics, chemistry, biological science, and psychology. The student should check specific requirements of the college to which he plans to transfer.

Pre-optometry requirements represent a minimum of two academic years of study, all of which can be taken at Junior College. Students must maintain a grade average of not less than C (2.0) to continue in this program.

Individual inquiry concerning optometry schools can be made in writing to the American Optometric Association, Department of Public Information, 4030 Chouteau Avenue, St. Louis 10, Missouri.

PRE-OPTOMETRY CURRICULUM Continued

Illinois College of Optometry

Suggested Courses

First Year

First Semester		Second Semester	
English 101	3	English 102	3
Biology 105 or 111	3, 4	Biology 106 or 121	3, 4
Mathematics 121 or 159	3	Mathematics 157	3
Political Science 101, 102, or 103	4, 3	Electives	6
Elective	3	Physical Education	1
Physical Education	1		

16, 17 hrs.

16, 17 hrs.

Second Year

Third Semester		Fourth Semester	
Chemistry 111	4	Physics 102	4
Mathematics 161 or elective	4	Electives	12
Physics 101	4		
Psychology 201	4		

16 hrs.

16 hrs.

Recommended electives: Biological Science, Social Science, Psychology, Speech, Literature, Foreign Language.

PRE-PHARMACY CURRICULA

The American Association of Colleges of Pharmacy, the National Association of Boards of Pharmacy, and the American Council on Pharmaceutical Education have decreed that preparation for the degree in Pharmacy shall be extended to cover five years. This requirement will take effect with the class entering in September 1960. Students entering Junior College in September 1960 will begin the five-year program.

Through September of 1959 students may enter as freshmen and complete the course in four years. Transfer students with one or more years of college may enter through September of 1960 and complete the course in an additional three years. Students entering Junior College until September 1960 will follow the four-year program.

Beginning in September 1960 all colleges of pharmacy will be on an extended program. At least one year in pre-pharmacy will be required for admission to the College of Pharmacy (1-4) plan. Transfer students with two years of college credit can complete the pharmacy program in an additional three years (2-3) plan. The total time required to earn the pharmacy degree in either case will be five years.

PRE-PHARMACY CURRICULA Continued

Ferris Institute

First Year

First Semester		Second Semester	
English 101	3	English 102	3
Biology 111 or 121	4	Biology 111 or 121	4
Chemistry 111	4	Chemistry 112 or 117	4, 5
Mathematics 157 or 159	3	Mathematics 157, 159, or elective	3
Physical Education	1	Physical Education	1

15 hrs.

15, 16 hrs.

Second Year

Third Semester		Fourth Semester	
Chemistry 221 or 225	4	Chemistry 222 or elective	4
Physics 101	4	Chemistry 223	2
Political Science 101 or 103	4, 3	Economics 201	3
Psychology 201	4	Physics 102	4
		Elective	4

16, 15 hrs.

17 hrs.

University of Michigan

Suggested Courses

First Year

First Semester		Second Semester	
English 101	3	English 102	3
Biology 111 or 121	4	Biology 111 or 121	4
Chemistry 111	4	Chemistry 112	4
Mathematics 157 or 159	3	Mathematics 157, 159 or elective	3
Physical Education	1	Physical Education	1

15 hrs.

15 hrs.

Second Year

Third Semester		Fourth Semester	
Economics 201	3	Economics 202	3
Physics 101	4	Chemistry 222	4
Political Science 102 or 103	3	Chemistry 223	2
Electives	6	Physics 102	4
		Elective	3

16 hrs.

16 hrs.

Suggested electives: Psychology 201; Speech 125; History 101, 102.

PRE-PHARMACY CURRICULA Continued

Wayne State University

First Year

First Semester		Second Semester	
English 101	3	English 102	3
Biology 121 or 111	4	Biology 111 or 121	3
Chemistry 111	4	Chemistry 112 or 117	4
Mathematics 157 or 159	3	Mathematics 157 or 159	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
15 hrs.		15 hrs.	

Second Year

Third Semester		Fourth Semester	
Chemistry 221 or elective	4	Chemistry 222	4
Economics 201	3	Chemistry 223	2
Physics 101	4	Economics 202	3
Political Science 101 or 103	4, 3	Physics 102	4
Elective	2, 3	Elective	3
<hr/>		<hr/>	
17, 16 hrs.		16 hrs.	

PHYSICAL THERAPY CURRICULUM

The American Physical Therapy Association requires the candidate to complete a minimum of 60 semester hours before entering the professional course. Upon completion of the following curriculum at Bay City Junior College the student is eligible for transfer to the professional program at other colleges. An overall average of 2.5 (C+) is required for entrance to the professional course.

Students entering upon this curriculum from high school should have completed one and one-half units of algebra and one unit of geometry. Biology, physics, and chemistry are strongly advised.

University of Michigan

Suggested Courses*

First Year

First Semester		Second Semester	
English 101	3	English 102	3
Chemistry 111	4	Chemistry 112	4
*Foreign Language	4	*Foreign Language	4
Mathematics 157	3	Mathematics 159	3
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
15 hrs.		15 hrs.	

PHYSICAL THERAPY CURRICULUM Continued

Second Year

Third Semester		Fourth Semester	
Biology 111	4	Biology 215	4
*Foreign Language	4	*Foreign Language	4
*Humanities	3	*Humanities	3
Psychology 201	4	Political Science 103	3
<hr/>		Psychology 202	3
15 hrs.		<hr/>	
		17 hrs.	

* See U. of M. distribution requirements on p. 27

Those entering college with mathematics deficiencies must take courses in mathematics to fulfill prerequisites for Mathematics 157

PUBLIC HEALTH CURRICULUM

University of Michigan

The curriculum in Public Health has thirteen divisions, among which are Public Health Administration, Public Health Dentistry, Public Health Nursing, Public Health Engineering, Industrial Health, Sanitary Science.

For a list of courses required for admission to any of the thirteen divisions see the catalogue of the School of Public Health of the University of Michigan.

Michigan State University

Suggested Courses*

First Year

First Semester		Second Semester	
English 101	3	English 102	3
*Biology 111	4	Biology 121	4
*Chemistry 111	4	Chemistry 112	4
Mathematics 157	3	Mathematics 159	3
Physical Education	1	*Speech 125	3
<hr/>		Physical Education	1
15 hrs.		<hr/>	
		18 hrs.	

Second Year

Third Semester		Fourth Semester	
Biology 205	4	Chemistry 222	4
Mathematics 161	4	Chemistry 223	2
Physics 101	4	Physics 102	4
*Psychology 201	4	*Political Science 101	4
Physical Education	1	Physical Education	1
<hr/>		<hr/>	
17 hrs.		15 hrs.	

* See M.S.U. Basic College requirements p. 26.

PRE-VETERINARY CURRICULUM

Michigan State University

The veterinary course is six years in length, two years of pre-professional and four years of professional study. The following program satisfies the pre-professional curriculum. It includes subjects which fill three of the four Basic College requirements of Michigan State University

Suggested Courses*

First Year			
First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 215	4
Chemistry 103 or 111	4	Chemistry 117	5
Mathematics 159		Mathematics 157	
or elective	3	or elective	3
Physical Education	1	Physical Education	1
	15 hrs.		16 hrs.

Second Year			
Third Semester		Fourth Semester	
Chemistry 225	4	Chemistry 222	4
Physics 101	4	Chemistry 223	2
*Political Science 101	4	Physics 102	4
*Speech 125	3	*Psychology 201,	
Physical Education	1	Geography 101 or 102	4
	16 hrs.	*Humanities	3
		Physical Education	1
			18 hrs.

* See M.S.U. Basic College requirements on p. 26.

One summer term should be taken at Junior College after the freshman or sophomore year to complete Humanities requirement. A student is not admitted to the professional school if he lacks any required subject or credit. Application for admission to the Veterinary College must be made at the close of the third semester of the Junior College course. A transcript of credits and a list of fourth semester courses must be submitted to M.S.U. at that time.

NATURAL RESOURCES

AGRICULTURE CURRICULUM

Michigan State University

Suggested Courses*

First Year			
First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 121	4
**Mathematics 121	3	Geology 101 or	
*Political Science 101	4	Psychology 201	4
Physical Education	1	**Mathematics 157	3
	15 hrs.	*Speech 125	3
		Physical Education	1
			18 hrs.

Second Year			
Third Semester		Fourth Semester	
Chemistry 103 or 111	4	Chemistry 112	4
Economics 201	3	Economics 202	3
*Philosophy 230	4	*History 101, 102	4
Physics 101	4	Physics 102	4
Physical Education	1	Physical Education	1
	16 hrs.		16 hrs.

* This program includes the four Basic College courses required at M.S.U. See p. 26. Some substitutions are possible.

** Six hours of college mathematics required.

CONSERVATION CURRICULA

University of Michigan

The specialized fields of study in the School of Natural Resources of the University of Michigan are Conservation, Fisheries, Forestry, Wild Life Management, Forest Products, Utilization, and Industrial Wood Technology. The following program will satisfy the requirements of the University of Michigan for the first two years in these specialized fields. Some variations may be necessary. The catalogue of the School of Natural Resources, University of Michigan, should be consulted for these variations.

Suggested Courses

First Year			
First Semester		Second Semester	
English 101	3	English 102	3
Biology 111	4	Biology 121	4
Chemistry 103 or 111	4	Mathematics 157 or 161	3, 4
Mathematics 121 or 159	3	Political Science 101,	
Physical Education	1	102, or 103	4, 3
	15 hrs.	Physical Education	1
			15, 16 hrs.

CONSERVATION CURRICULA Continued

Third Semester		Second Year	Fourth Semester	
*Drawing 101 .	3		Biology 215 .	4
Economics 201	3		Chemistry 104, 112, or	
*Geology 101	4		Physics 102	4
*Physics 101	4		Economics 202	3
Speech 221	3		English 223 or 241	3
			Elective	3
		17 hrs.		17 hrs.

* Elective may be substituted.

Michigan State University

The specialized programs offered at Michigan State University under the division of Conservation are Fisheries and Wildlife; Forest Products; Lumber and Building Materials Merchandising; Residential Building; Wood Processing and Technology; Packaging Technology; Land and Water Conservation, which includes Rural Land and Water Conservation; and Park Management and Municipal Forestry.

The curriculum offered at Bay City Junior College will satisfy the requirements of Michigan State University in most of these programs. Slight variations may be necessary. The Michigan State University catalogue should be consulted.

Suggested Courses*

First Semester		First Year	Second Semester	
English 101	3		English 102 .	3
Biology 111	4		Biology 121	4
**Mathematics 121 or			*Geology 101 or	
elective	3		Psychology 201 .	4
*Political Science 101 . .	4		**Mathematics 157 or	
Physical Education . .	1		elective	3
		15 hrs.	*Speech 125	3
			Physical Education . . .	1
				18 hrs.

Third Semester		Second Year	Fourth Semester	
Chemistry 103 or 111 .	4		Chemistry 112 .	4
Economics 201 . . .	3		Economics 202	3
*Philosophy 230 . . .	4		*History 101 or 102	4
Physics 101	4		Physics 102	4
Physical Education . . .	1		Physical Education	1
		16 hrs.		16 hrs.

* This program provides for the completion of the four Basic College courses.

See p. 26.

** Six hours of college mathematics required.

FORESTRY CURRICULUM

Michigan College of Mining and Technology

Forest Management and Wood Utilization are the two courses of study now available in the Department of Forestry of Michigan College of Mining and Technology.

Suggested Courses

First Semester		First Year	Second Semester	
English 101	3		English 102	3
Biology 111	4		Biology 121 .	4
Chemistry 103 or 111	4		Chemistry 117 .	5
*Mathematics 157 . . .	3		*Mathematics 159	3
Physical Education . . .	1		Physical Education	1
		15 hrs.		16 hrs.

Third Semester		Second Year	Fourth Semester	
Economics 201	3		*Drawing 101	3
Geography 101	4		Economics 202 .	3
Physics 101	4		*Geography 101 .	4
Political Science 101 . .	4		*History 201 or 202	3
Physical Education . . .	1		Physics 102	4
		16 hrs.	Physical Education . . .	1
				18 hrs.

* Elective may be substituted.

The curriculum for Wood Utilization calls for Math. 161, 162, and 213 instead of the mathematics listed in above program. Chemistry 225, quantitative analysis, also should be taken in addition to the chemistry listed.

PUBLIC SERVICE

POLICE ADMINISTRATION AND PUBLIC SAFETY CURRICULUM

Michigan State University

The Police Administration curriculum is designed to facilitate the student's entrance as a junior into the Police Administration curriculum of Michigan State University. Before admission to this curriculum the student must have completed one unit of high school algebra and one unit of geometry or the Junior College equivalents, Mathematics 15 and 21. In addition to the courses which will satisfy the requirements of Michigan State University's Basic College (see p. 26), there are added requirements for certain divisions of this program. For details refer to M.S.U. catalogue and confer with Junior College adviser.

PUBLIC ADMINISTRATION CURRICULUM

Michigan State University

The program in Public Administration prepares for employment in a wide variety of positions in national, state, county, and city government. Before admission to this curriculum the student must have completed one unit of high school algebra and one unit of geometry or the Junior College equivalents, Mathematics 15 and 21

Suggested Courses*

First Year

First Semester		Second Semester	
English 101	3	English 102	3
*History 101	4	*Humanities	3, 4
Political Science 101	4	Political Science 102	3
*Science	4	*Science	4
Physical Education	1	Elective	2
	16 hrs.	Physical Education	1
			16, 17 hrs.

Second Year

Third Semester		Fourth Semester	
Accounting 201	3	Accounting 202	3
Economics 201	3	Economics 202	3
History 201	3	History 202 or 211	3, 4
Sociology 201	3	*Humanities	3
*Speech 125	3	Psychology 201	4
Physical Education	1	Physical Education	1
	16 hrs.		17, 18 hrs.

* See M.S.U. Basic College requirements on p. 26.

SOCIAL WORK CURRICULUM

A major in Social Work may be obtained in the Liberal Arts division of many four year colleges and universities. A School of Social Work is, however, a graduate school. To prepare for social work, the Junior College student should follow a Liberal Arts program as outlined on p. 60. He should check carefully the distribution requirements of the college to which he plans to transfer. See pp. 25-28 for distribution requirements of colleges.

Recommended electives: Economics 111, 112 or 201, 202; History 201, 202; Political Science 101, 102; Psychology 201, 202, 203; Sociology 201, 202; Speech 125, 221. Michigan State University requires Mathematics 121.

SCIENCE

CHEMISTRY CURRICULA

These curricula are designed to satisfy the requirements of the Chemistry Departments of the University of Michigan and of Michigan State University. They presuppose that the entering student has had one and one-half units of high school algebra, one unit of plane geometry, one-half unit of trigonometry, and one-half unit of solid geometry. Mathematics deficiencies must be made up during the first semester if the curricula are to be completed in two years.

University of Michigan

Suggested Courses*

First Year		Second Year	
First Semester		Second Semester	
English 101	3	English 102	3
Chemistry 103 or 111	4	Chemistry 112 or 117	4, 5
Mathematics 161 or Math. deficiency courses	4	Mathematics 161 or 162	4
*Political Science 101	4	*Political Science 102 or Social Science elective	3, 4
Physical Education	1	Physical Education	1
	16 hrs.		15, 17 hrs.
Third Semester		Fourth Semester	
Chemistry 221 or 225	4	Chemistry 222 and 223 or 225	6, 4
German 111	4	German 112	4
*Humanities	3	*Humanities	3
Mathematics 162 or 213	4	*Mathematics 213 or elective	4
	15 hrs.		17, 15 hrs.

* For U. of M. distribution requirements see p. 27

Michigan State University

Suggested Courses*

First Year		Second Semester	
First Semester		Second Semester	
English 101	3	English 102	3
*Biology 105 or Physiology 103	3, 4	Chemistry 112 or 117	4, 5
Chemistry 103 or 111	4	Mathematics 161 or 162	4
Mathematics 161 or Math. deficiency course	4	Political Science 101	4
Physical Education	1	Physical Education	1
	15, 16 hrs.		16, 17 hrs.

CHEMISTRY CURRICULA Continued

Second Year			
Third Semester		Fourth Semester	
Chemistry 221 or 225	4	Chemistry 222 and 223 or 225	6, 4
Mathematics 162 or 213	4	*Mathematics 213 or elective	4
Physics 101 or German 111	4	Physics 102 or German 112	4
*Speech 125	3	*Social Science elective	4
Physical Education ..	1		—
	16 hrs.		18, 16 hrs.

* This curriculum is designed to satisfy three of the four required Basic College courses. See p. 26.

COURSES OF INSTRUCTION

NUMBERING OF COURSES

1. Courses numbered 101-199 are intended chiefly for freshmen but may be elected by sophomores.
2. Courses numbered 200-299 are intended chiefly for sophomores but in some cases may be elected by freshmen.
3. Courses numbered below 100 may or may not be transferable to other colleges.
4. The course number followed by the letter a, b, or c indicates that enrollment has been made for partial credit. The Evening College uses this device to spread over a two-semester period a course which normally would be completed in one semester.

PREREQUISITES

Those courses which have definite prerequisites are so indicated. Otherwise, there is no prerequisite.

The College reserves the right to withdraw any courses for which there are not reasonable enrollments.

COURSE INDEX

Accounting	81-82	History	97
Architecture	82	Mathematics	98-101
Art	82-83	Music	101-102
Biology	83-84	Nursing	102
Business	84-87	Nutrition	102
Chemistry	88-90	Philosophy	103
Drawing	90-91	Physical Education	103-105
Economics	91-92	Physics	105-106
Education	92-93	Physiology and Hygiene	106-107
Electronics	93	Political Science	107
English	93-94	Psychology	108
Foreign Language	94-96	Religion	108
Geography	96	Shop	108-110
Geology	96-97	Sociology	110
		Speech	110-111

ACCOUNTING

111 Principles of Accounting

3 hrs. credit

An introduction to accounting as first applied to a sole proprietorship. The meaning and purpose of accounting; statements; theory of debits and credits; trial balance; prepaid, unearned, and accrued items; depreciation and valuation of accounts receivable. Journalizing includes use of the general, purchase, sales, cash, and combination journals.

112 Principles of Accounting

3 hrs. credit

Prerequisite: Acct. 111 A continuation of Acct. 111 Includes the voucher system; payroll, sales, property and income taxes; partnership formation and procedures; corporation formation, records, surplus, dividends, stocks and bonds; departmental accounting; introduction to manufacturing and cost accounting.

Note: Credit will not be given for both 111 and 201 or 112 and 202.

201 Principles of Accounting

4 hrs. credit

An introduction to accounting in which the approach is made through the corporate form of business. Methods of recording, reporting, and interpreting the financial data of the business unit are stressed. Includes the income statement and position statement; general ledger; accounts; journals; subsidiary ledgers; cash records; recording of revenues and receivables; adjusting and closing entries. 6 hrs. weekly.

202 Principles of Accounting

4 hrs. credit

Prerequisite: Acct. 201 A continuation of Acct. 201 Deals with accounts and notes receivable; discounted notes receivable; discounted notes and bills; merchandising and manufacturing accounts; fixed assets, depreciation, and depletion; consignments and installment sales; partnership; corporate capital accounts; dividends and retained earnings; bonds; preparation and interpretation of financial statements. Included are topics often studied in intermediate courses. 6 hrs. weekly.

261 Cost Accounting

3 hrs. credit

Prerequisite: Acct. 112 or 202. Cost accounting in its relationship to factory accounting to classify in detail the cost of production. Discloses inefficiency and indicates profit and loss on each kind of goods or job. A study of departmental process, sequential and job costs, cost records, procedure reports, and distribution of burden.

262 Federal Tax Accounting

3 hrs. credit

Prerequisite: Acct. 112 or 202. A study of the federal income tax laws. Major emphasis upon tax laws as they relate to individuals and small business. Brief survey of corporation and partnership income tax laws.

263 Social Security and Payroll Accounting

3 hrs. credit

Prerequisite: Acct. 111 or 201 Federal Social Security laws and State Unemployment Compensation laws as applied to business. A brief survey of other Michigan tax laws included.

264 Auditing Theory and Procedure 3 hrs. credit

Prerequisite: Acct. 112 or 202. The principles and procedures of auditing, giving attention to the balance sheet audit, detailed audit, and special investigations.

ARCHITECTURE**101 Architectural Projections 2 hrs. credit**

Simple projection as applied to plans, sections, and elevations; inter-sections and developments. 4 hrs. weekly.

102 Graphics 2 hrs. credit

Prerequisite: Arch. 101 or equivalent. Architectural perspective, shades, and shadows. 4 hrs. weekly.

111 Architectural Details 3 hrs. credit

Elements of planning and construction for small homes in masonry and frame construction. Lettering, symbols and convention, footings, foundation, windows, doors, cornices, stairs. Specifications and cost estimates. 6 hrs. weekly.

112 Small Home Planning 3 hrs. credit

Prerequisite: Arch. 111. Development of plans for small house of frame or masonry construction, containing plot, basement, and floor plans; elevations, typical wall section, details, specifications, perspective, and cost estimate. 6 hrs. weekly.

211 Architecture 3 hrs. credit

Prerequisite: Arch. 112. Complete scaled model of a house from the student's plans for class demonstration. Landscaping and rendering of the model. Term paper required. 6 hrs. weekly.

212 Architecture 3 hrs. credit

Prerequisite: Arch. 211. Design of a small commercial building (apartment, store, motel, professional, or industrial) complete with all working drawings, details, specifications, and rendered perspective. 6 hrs. weekly.

ART**101 Freehand Drawing 3 hrs. credit**

A beginning course in art designed for all students interested in creative expression in pencil, pen and ink, and wash. Representation and composition studied by drawing simple forms, in line and value, with introduction of perspective. 6 hrs. weekly.

102 Drawing and Composition 3 hrs. credit

Prerequisite: Art 101. Designed to give further understanding of composition and to develop creative ability in drawing. The representation of form with emphasis on values and textures as well as the study of abstract compositions. Problems using charcoal. 6 hrs. weekly.

105 History of Western Art 3 hrs. credit

A general survey of the history of Western Art from prehistoric times through the 16th century, dealing with outstanding masterpieces and representative artists of the Egyptian, Greek, Roman, Romanesque, Gothic, and Renaissance periods. Emphasis upon architecture and sculpture.

106 History of Western Art 3 hrs. credit

A continuation of Art 105. A general survey of the history of Western Art from the Renaissance through the baroque, neo-classical, romantic, impressionistic, expressionistic, and modern non-objective periods. Emphasis upon painting.

108 Introduction to Design 2 hrs. credit

The basic elements of design: line, form, space, value, texture, and color experienced through materials in two or three dimensions, using the abstract approach. 6 hrs. weekly.

109 Introduction to Color 2 hrs. credit

Prerequisite: Art 108. Projects and experiments with color in various media. 6 hrs. weekly.

111 Art Education 3 hrs. credit

Introduction to art for prospective teachers. Develops the ability to stimulate the interest of children in art. Uses a wide variety of methods and materials adjusted to various grade levels. 6 hrs. weekly.

112 Art Education 3 hrs. credit

A continuation of Art 111. Further art experiences related especially to upper-grade teaching. 6 hrs. weekly.

135 Drawing and Painting 3 hrs. credit

Prerequisites: Art 101 and 102. Experimentation in water color, oil, tempera, and other media, stressing techniques, composition, and color, based upon studies in still life and landscape. Recommended to students interested in art as a hobby. 6 hrs. weekly.

236 Advanced Drawing and Painting 3 hrs. credit

Prerequisite: Art 135. Still life, landscape, and non-objective problems in water-color, tempera, and oil. Recommended to students interested in art as a hobby. 6 hrs. weekly.

BIOLOGY**105 General Biology 3 hrs. credit**

Designed primarily for liberal arts students and other non-science majors. Fundamentals governing the structure, function, and development of living things and their inter-relationships. Two hours of lecture and discussion and two hours of laboratory weekly.

106 General Biology 3 hrs. credit

Prerequisite: Biology 105. A continuation of Biology 105. Two hours of lecture and discussion and two hours of laboratory weekly.

111 General Zoology 4 hrs. credit

Designed for students planning to concentrate in science. Deals with classification, structure, function, environmental relations, origin, and development of animals. Illustrations and application of the scientific method. Two hours of lecture and discussion and six hours of laboratory weekly.

121 General Botany 4 hrs. credit

Study of morphology, activities, evolutionary relationships, and economic importance of major plant groups. Two hours of lecture and discussion and six hours of laboratory weekly.

205 Microbiology 4 hrs. credit

Prerequisite: Biology 111 or 121 or equivalent and Chemistry 103 or 111. Introduction to micro-organism: kinds, distribution, and control. Microbial classification. Two hours of lecture and discussion and six hours of laboratory weekly.

215 Comparative Vertebrate Anatomy 4 hrs. credit

Prerequisite: Biology 111 completed with minimum grade of C. Evolution of the larger taxonomic groups of chordates and a comparative study of their gross morphology. Special emphasis on dissection of various chordates and their relationship. Two hours of lecture and discussion and six hours of laboratory weekly.

BUSINESS**101 Beginning Typewriting 2 hrs. credit**

A mastery of the keyboard and practice in the basic skills and techniques of the touch system of typewriting, for personal or vocational use. 4 hrs. weekly.

102 Intermediate Typewriting 2 hrs. credit

Prerequisite: Bus. 101 or its equivalent. Vocational training for business. Special drills for perfecting the techniques necessary for accuracy and speed in typewriting, particularly in business letters, tabulations, reports, and other forms used in business offices. Training in the use of transcribing machines and duplication processes. 4 hrs. weekly.

103 Advanced Typewriting 2 hrs. credit

Prerequisite: Bus. 102 or its equivalent. The planning and production of a variety of typical business projects, at a rate equivalent to that expected in an office. Advanced drill and copy work to develop speed and accuracy. 4 hrs. weekly.

111 Beginning Shorthand 4 hrs. credit

The principles of Gregg shorthand, including a study of brief forms, vocabulary, and pre-transcription training. 5 hrs. weekly.

112 Intermediate Shorthand and Dictation 4 hrs. credit

Prerequisites: Bus. 101 and 111 or their equivalent. Must be accompanied by Bus. 102 or 103. Acquisition of speed in taking dictation and development of transcription skill, speed, and artistic arrangement. Includes grammar review, vocabulary study, and spelling. 5 hrs. weekly.

113 Dictation and Transcription 3 hrs. credit

Prerequisite: Bus. 112. Emphasis placed on the development of skills in handling a more difficult vocabulary, the increase of speed of dictation and length of dictation period, as well as an increase in speed and accuracy of transcripts.

114 Advanced Dictation and Transcription 3 hrs. credit

Prerequisite: Bus. 113. Designed to develop high speed in taking and transcribing dictation. Attention given to specialized vocabulary and materials in the reporting, medical, legal, and chemical fields, according to the particular interests of individual students.

117 Transportation and Traffic Management 3 hrs. credit

Designed to provide the information, practice, and techniques necessary to qualify for positions in the Traffic Management Divisions of larger industry. Covers the history of American Transportation System, developments leading to Federal regulation of carriers other than railroads, classification of freight, principles of freight rates and tariffs, shipping documents and their application in freight claims.

118 Transportation and Traffic Management 3 hrs. credit

A continuation of Tran. and Tr. Mgnt. 117. Deals with tariff circulars, construction and filing of tariffs, freight rates and tariffs, terminal facilities and switching, demurrage, transit privileges, warehousing and distribution, materials handling and packaging. See Bus. 217 and 218 for advanced courses.

121 Machine Calculation 2 hrs. credit

Students weak in arithmetic should take Math. 101 before electing this course. A laboratory course dealing with the basic operations of such calculating machines as Monroe, Marchant, Comptometer, Burroughs, and the all keyboard and ten-key adding machines. 5 hrs. weekly.

122 Machine Calculation 2 hrs. credit

A continuation of Bus. 121, with emphasis on vocational efficiency and speed. 5 hrs. weekly.

123 Machine Calculation 2 hrs. credit

Advanced study in machine calculation. Designed particularly for specialization. 5 hrs. weekly.

Business 121, 122, 123 may be taken separately or concurrently.

*** 131 Filing 1 hr. credit**

Gives a practical working knowledge of the alphabetic and numeric systems of filing.

**** 132 Filing and Records Management 1 hr. credit**

Prerequisite: Bus. 131 A continuation of the study of filing systems and filing as a basic tool of management. Such factors considered as equipment and supplies, the use and control of records, and the transfer and disposal of records.

**** 133 Advanced Filing and Records Management 1 hr. credit**

Prerequisite: Bus. 132. A continuation of the study of records management and specific filing problems, with outside readings, field trips, oral and written reports.

** One or more units Bus. 131, 132, 133 may be taken in one semester.

161 Business Organization 3 hrs. credit

Acquaints student with principles, problems, and practices of business and industry. Consideration given to the areas of organization, management, labor, production, markets, finance, and insurance. Designed also to help business students select a field of specialization.

176 Advertising 3 hrs. credit

A study of the basic elements of advertising. Special emphasis placed on the investigation of economic and social aspects of advertising, media selection, and package design. Trade names, marks, and slogans discussed.

181 Salesmanship 3 hrs. credit

Deals with the fundamentals of selling. Includes analyzing the product; evaluation of customer's needs, desires, and buying motives; the application of sales procedures. Provides training in sales techniques and in the development of sales personality.

217 Transportation and Traffic Management 3 hrs. credit

Prerequisite: At least one semester of Transportation and Traffic Management or its equivalent. A continuation of Tran. and Tr. Mgnt. 117-118, including through-routes and rates, milling in transit, technical tariff and rate interpretation, overcharges and undercharges, losses and damages, import and export traffic, and rate committee procedure.

218 Transportation and Traffic Management 3 hrs. credit

A continuation of Tran. and Tr. Mgnt. 217, including evolution of the Interstate Commerce Act, construction of the Interstate Commerce Act, its interpretation and application, procedures and practice before the Interstate Commerce Commission, statutory authority for awarding damages, and a review of decisions of the Inter-State Commerce Commission.

241 Business Practice 3 hrs. credit

Prerequisites: Bus. 102 or equivalent and Eng. 116. Business Practice is recommended for all business students. Co-ordinates the specialized skills and knowledge acquired in the accounting, general business, and secretarial curricula. The importance of the office in today's economy and the specific office service units studied from the managerial and the office employee's point of view. Stress placed upon the human relations element as it applies to efficient, harmonious office procedures in the modern business office. Office practices integrated primarily through the completion of projects and through the Case Study approach.

251 Business Law 3 hrs. credit

A study of contracts (negotiable instruments, employment, bailments), agency, and personal property.

252 Business Law 3 hrs. credit

A study of sales, insurance, real property, trusts, partnerships, and corporations.

271 Marketing 3 hrs. credit

An introduction to the functional aspects of marketing; its institutions; price determination, merchandising, and distribution of products.

Related Business Subjects

English 116 Business Communication (See p. 94) 3 hrs. credit

English 117 Business Communication (See p. 94) 3 hrs. credit

Mathematics 101 Business Computation (See p. 99) 3 hrs. credit

Mathematics 142 Business Statistics (See p. 100) 3 hrs. credit

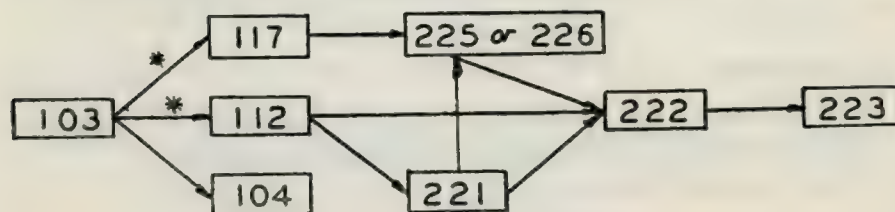
Speech 125 Principles of Public Speaking (See p. 110) 3 hrs. credit

CHEMISTRY

SEQUENCES OF CHEMISTRY COURSES

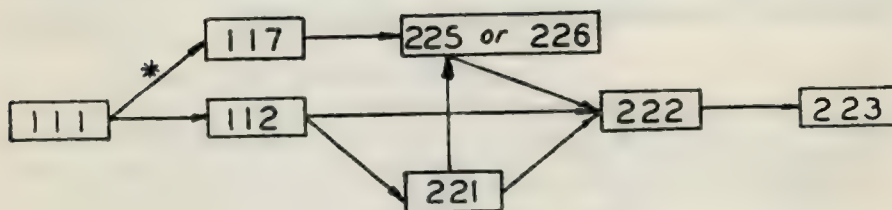
For students entering Junior College

a) With no high school chemistry



Chem. 103 — 104 sequence is not acceptable as a prerequisite for advanced chemistry.

b) With high school chemistry



*Above average grades and consent of chemistry department are necessary.

Engineering students should consult the catalogues of the senior colleges to which they plan to transfer to determine their chemistry sequences.

CHEMISTRY

103 General and Inorganic Chemistry

4 hrs. credit

Prerequisite: One year of high school algebra and satisfactory placement test scores. For those who have not studied chemistry in high school. Those completing Chem. 103 are expected to elect 104 or 112 the following semester. Lecture, quiz, and laboratory.

104 General and Inorganic Chemistry

4 hrs. credit

Prerequisite: Chem. 103. A continuation of Chem. 103. Chem. 103 and 104 satisfy the science requirement in liberal arts. Not accepted as a prerequisite for advanced courses in chemistry. Lecture, quiz, and laboratory.

111 General and Inorganic Chemistry

4 hrs. credit

Prerequisite: High school chemistry and one year of high school algebra with satisfactory placement test scores. For students in chemical engineering, agriculture, nursing, pre-dentistry, pre-medicine, medical technology, pre-veterinary, pre-forestry, home economics, and related curricula of chemistry. Includes laws of chemical combination, states of matter, atomic and molecular structure, physical and chemical properties of matter. Lecture, quiz, and laboratory.

112 General and Inorganic Chemistry

4 hrs. credit

Prerequisites: Chem. 103 or Chem. 111. A continuation of Chem. 111. Descriptive study of metals and non-metals; further study of principles. Recommended for students desiring advanced study in chemistry. Lecture, quiz, and laboratory.

115 General Inorganic Chemistry for Engineers

5 hrs. credit

Prerequisites: High school chemistry or Chem. 103 and one and one-half units of high school algebra. The descriptive chemistry of some of the non-metallic elements and of the more important metallic elements, along with the important laws and principles. Lecture, quiz, and laboratory.

117 Inorganic Chemistry and Qualitative Analysis

5 hrs. credit

Prerequisite: Chem. 111 and consent of Chairman of Chemistry Department. A continuation of general chemistry with emphasis on semi-micro qualitative analysis for laboratory work. Four hours of lecture and quiz and six hours of laboratory weekly.

125 Chemistry of Engineering Materials

3 hrs. credit

Designed for engineers. A study of the manufacture and properties of ferrous and non-ferrous alloys, cements, clay products, protective coatings, fuels, and water softening.

221 Qualitative Analysis

4 hrs. credit

Prerequisite: Chem. 112. Explanation of laboratory procedure in terms of the principles of general chemistry. Semi-micro laboratory procedure involves identification of common metals through appropriate unknowns; also the identification of common acid groups. Two hours of lecture and quiz and two four-hour laboratory periods weekly.

222 Organic Chemistry 4 hrs. credit

Prerequisites: Chem. 112 or 115. A first course in the basic principles of organic chemistry, dealing with the carbon compounds of both the aliphatic and aromatic series. Major emphasis on the aliphatic series. Fills the requirements for medicine, dentistry, pharmacy, agriculture, home economics, and other related curricula.

223 Organic Chemistry Laboratory 2 hrs. credit

Prerequisite: Chem. 222. Preparation of a number of typical organic compounds and determination of their physical constants. Two four-hour laboratory periods weekly.

225 Quantitative Chemistry 4 hrs. credit

Prerequisite: Chem. 117 or 221. Knowledge of common logarithms essential. Theory and practice of volumetric and gravimetric analysis. Major emphasis on volumetric analysis. Three hours of lecture and quiz and two four-hour laboratory periods weekly.

226 Quantitative Chemistry 3 hrs. credit

Prerequisite: Chem. 117 or 221. Similar to Chem. 225 but adapted to the needs of medical technology students. Not accepted for chemistry or pre-medicine majors. Three hours of lecture and quiz and two four-hour laboratory periods weekly.

251 Organic Chemistry 2 hrs. credit

Prerequisite: Chem. 222 or its equivalent. Emphasis on mechanics of organic reactions as applied to industry.

252 Organic Chemistry 2 hrs. credit

Prerequisite: Chem. 251. A continuation of Chem. 251.

DRAWING**101 Mechanical and Machine Drawing 3 hrs. credit**

Principles of orthographic projection, making of working drawings, correct drafting-room practice in conventional representation, use of instruments, freehand and mechanical lettering, reading and checking of drawings, instruction on blue and white printing, practice in tracing, original drawing on vellum. 6 hrs. weekly.

102 Descriptive Geometry 3 hrs. credit

Prerequisites: Draw. 101 and Math. 155 or its equivalent. Emphasis on the ability to visualize problems and on processes of solution. Includes problems comprising combinations of the point, lines and planes, intersections, developments, warped surfaces, and tangent planes. 6 hrs. weekly.

120 Lettering 2 hrs. credit

History, styles, and methods of lettering; basic forms, media and tools, techniques, and designs; daily plates and a term plate. 4 hrs. weekly.

130 Blue Print Reading 2 hrs. credit

Fundamental principles of representing objects by blue prints, with detailed analysis of both industrial and architectural blueprints. Provides both understanding and skill sufficient to make such practical use of blueprints as may be demanded on the job. 4 hrs. weekly.

131 Intermediate Blueprint Reading 1 hr. credit

A continuation of Drawing 130. 2 hrs. weekly.

140 Shop Sketching 2 hrs. credit

Training in clear, readable, rapidly executed freehand sketches for machinists, fabricators, draftsmen, and engineers. Includes shop and field sketching in orthographic projection, oblique, isometric, and perspective. 4 hrs. weekly.

151 Industrial Drawing 3 hrs. credit

Practical introduction to engineering, drafting, and shop practice. Shop sketching, typical plant layouts, piping drawing, pattern drawing, machine design, and elementary sheet metal layouts. Emphasis on developing clear shop drawings from shop sketches and notes. Practical application of pictorial representation and orthographic projection. 6 hrs. weekly.

152 Descriptive Geometry 3 hrs. credit

Prerequisite: Draw. 151. Problems in visualization, point, line, true length, revolution, normal views, intersection, developments, warped surfaces, and tangent planes. 6 hrs. weekly.

251 Industrial Drawing 3 hrs. credit

Prerequisite: Draw. 152. Deals with original and assigned problems, including original thinking and planning. Problems conceived, planned, drawn, and, if possible, constructed by the student, using available processes and materials. Cost estimates, bills of materials, specifications, and type-written report accompany each problem. Field trips during the semester 6 hrs. weekly.

252 Advanced Industrial Drawing 3 hrs. credit

Prerequisite: Draw. 251. A continuation of Draw. 251. 6 hrs. weekly.

ECONOMICS**111 Elementary Economics 3 hrs. credit**

Designed to acquaint the student with practical economics.

112 Elementary Economics 3 hrs. credit

Prerequisite: Econ. 111. A continuation of Econ. 111. Deals with applied modern problems in economics.

121 Labor Relations 3 hrs. credit

A study of the human factor in industry. Problems of wages, hours, unemployment, working conditions; federal and state laws which relate to labor-management relations; policies and practices of unions.

201 Principles of Economics**3 hrs. credit**

Open only to sophomores. A basic course in beginning economics: relation of production and income; forms of business organization; money and banking system of the United States; value of money; employment; business cycles and economic instability.

202 Principles of Economics**3 hrs. credit**

Prerequisite: Econ. 201 A continuation of Econ. 201 The forces which determine prices under competition and under varying degrees of monopoly; function of prices and costs in allocating production factors; distribution of income; public finance; alternative economic systems.

EDUCATION**101 Refresher in Teaching Methods****3 hrs. credit**

Designed for those planning to return to teaching after some years' absence or wishing to qualify as substitutes in the Bay City School System. Special attention to recent developments in elementary education. Individual and small group study of special teaching problems.

102 Education**2 hrs. credit**

Prerequisite: Ed. 101. A continuation of Ed. 101.

201 Principles of Teaching**3 hrs. credit**

Examination of the aims toward which teaching should be directed and of conditions essential to successful teaching and learning. Analysis of the various types of learning activities. Observation and critical evaluation of teaching procedures.

203 Methods of Teaching**3 hrs. credit**

Methods of teaching as applied to rural schools. A brief consideration of the principles involved in teaching and learning; application of these principles in selection of subject matter and activities; emphasis on teaching reading, writing, spelling, and language. Observation of the work of the kindergarten and first six grades in the training school.

204 Methods of Teaching**3 hrs. credit**

Similar to Ed. 203 with emphasis placed on the teaching of literature, arithmetic, elementary science, and social studies, including geography and history.

Education 201, 203, 204 open only to sophomores who have completed the requirements for entry into the second year of County Normal or State Limited Certificate programs.

207 Rural School Management**3 hrs. credit**

Prerequisites: Ed. 201, 203, and 204. Preparation to teach in the rural schools. Principles basic to the effective organization and management of classes; classroom routine, tests and measurements, records and reports, case studies of behavior problems, individual differences and class adjustments, professional ethics, and relations with parents and community.

212 Supervised Teaching**5 hrs. credit**

Prerequisites: Ed. 201, 203, and 204. A laboratory course requiring two hours a day, five days a week, for ten weeks of class meetings, conferences, and assigned readings. Eight weeks of half-day teaching under supervision in the Bay City Schools, followed by two weeks of fulltime teaching under supervision in nearby county schools.

Education 207 and 212 offered for the last time in 1959-1960.

ELECTRONICS**151 Electronics****3 hrs. credit**

Fundamentals of radio receiver servicing. Covers material necessary to prepare for F.C.C. second class radio telephone license; electronic theory, elements of radio broadcasting, and receiver and circuit analyses.

152 Intermediate Electronics**3 hrs. credit**

A continuation of Elec. 151 Advanced radio theory, modulation, class A and B amplifiers, F.M., and F.M. communication equipment.

ENGLISH**5 Freshman English****3 hrs. credit**

Designed to help students increase their ability to express themselves clearly and convincingly and to read with understanding.

6 Freshman English**3 hrs. credit**

Prerequisite: Eng. 5. A continuation of Eng. 5.

12 Reading Improvement**1 hr. credit**

Intended for all students who wish to improve their reading speed and comprehension. Presented on an individual basis.

14 School Publications**1 hr. credit**

Gives students interested in publications an opportunity for group discussion of problems relating to the College paper and yearbook. Each student automatically becomes a staff member of the Bay City Junior College publications.

15 School Publications**1 hr. credit**

A continuation of Eng. 14.

101 Composition and Reading — Freshman Course**3 hrs. credit**

Designed to develop competence in reading and writing. Emphasizes study of essays, writing of themes, both prepared and impromptu, and usage.

102 Composition and Reading — Freshman Course**3 hrs. credit**

Prerequisite: Eng. 101 Continued practice in reading and writing. Readings consist of fiction and more difficult essays. Themes, both prepared and impromptu. Research paper required.

116 Business Communication 3 hrs. credit

Designed to develop skill in writing business letters: inquiry, orders, acknowledgments, and application. Review of English fundamentals. Student must take Business 101 concurrently unless he presents equivalent credit.

117 Business Communication 3 hrs. credit

Prerequisite: Eng. 116. Continued practice in writing business letters, with emphasis on sales letters, replies to prospects, collections, claims, and adjustments; advertising copy; collection of information for reports. All assignments must be typewritten.

201 Advanced Composition 3 hrs. credit

Prerequisite: Eng. 102. Designed to promote increased skill in writing. Offers practice in reading and writing various forms of literature. Provides individual, as well as class, instruction.

223 Introduction to Literature 3 hrs. credit

Designed to increase the student's ability to read literature with understanding and enjoyment. Half the semester devoted to the reading and discussion of several novels and half to poetry of various periods and types.

224 Introduction to Drama 3 hrs. credit

Concerned with understanding and appreciation of drama. Half the semester given to the close reading of five or six of Shakespeare's plays and half to selected plays of the nineteenth and twentieth centuries.

241 American Literature 3 hrs. credit

Acquaints the student with the literary heritage of America from Irving to the present day.

FOREIGN LANGUAGE

Many four-year colleges and universities have a foreign language requirement for graduation. Students should check carefully to see that they meet the language requirements of the colleges to which they may be transferring.

FRENCH**111 Elementary French 4 hrs. credit**

Basic grammatical construction, fundamentals of pronunciation with laboratory assignments, daily oral-aural practice, composition, reading, acquisition of French vocabulary.

112 Elementary French 4 hrs. credit

Prerequisite: Fr. 111 or one year of high school French. A continuation of Fr. 111. Oral-aural practice continued with laboratory assignments, grammar principles, accompanied by exercises and written composition. Outside reading for comprehension of easy French reading material without translation.

211 Intermediate French 4 hrs. credit

Prerequisite: Fr. 112 or two years of high school French. Review and application of essential principles of French grammar by means of oral and written exercises and composition, pronunciation through oral and aural exercises and conversation, reading of French prose, outside reading to develop ability to read rapidly at sight. As far as possible conducted in French.

212 Intermediate French 4 hrs. credit

Prerequisite: Fr. 211 or three years of high school French. A continuation of Fr. 211, with somewhat more emphasis on oral skill and conversation.

GERMAN**111 Elementary German 4 hrs. credit**

Designed to develop ability to read standard German. Emphasis on oral-aural aspects of the language by means of oral reading, aural comprehension, recordings, and use of phrases and idioms frequent in conversation.

112 Elementary German 4 hrs. credit

Prerequisite: Ger. 111 or one year of high school German. A continuation of Ger. 111.

221 Scientific German 4 hrs. credit

Prerequisite: Germ. 112 or its equivalent. Selected reading in science for comprehension and translation of German scientific publication. Emphasis on specialized vocabulary and on structural patterns.

222 Scientific German 4 hrs. credit

Prerequisite: Germ. 221. A continuation of Germ. 221

HEBREW**151 Biblical Hebrew 2 hrs. credit**

Grammar of Old Testament Hebrew with attention to elementary forms of vocabulary. Furnishes working knowledge of the language for understanding original writings of the Old Testament.

SPANISH**111 Elementary Spanish 4 hrs. credit**

Grammatical constructions, accompanied by exercises and easy composition. Emphasis on pronunciation. Daily oral-aural practice with language laboratory assignments.

112 Elementary Spanish 4 hrs. credit

Prerequisite: Sp. 111 or one year of high school Spanish. A continuation of Sp. 111

211 Intermediate Spanish**4 hrs. credit**

Prerequisite: Sp. 112 or two years of high school Spanish. Reading of modern texts. Review and application of essential principles of grammar by means of oral and written exercises. Composition weekly. Conversation. Outside reading to develop ability to read rapidly at sight.

212 Intermediate Spanish**4 hrs. credit**

Prerequisite: Sp. 211 or three years of high school Spanish. A continuation of Sp. 211.

GEOGRAPHY**101 Introductory Geography****4 hrs. credit**

Introduction of geographic elements found on the earth which affect the distribution of man. It is to the advantage of the student to have had Math. 15 or its equivalent.

102 World Regional Geography**4 hrs. credit**

Survey of world geographic regions.

203 Economic Geography**3 hrs. credit**

Prerequisite: Geog. 101 or 102. Open to freshmen with permission of instructor. Fundamentals of economic geography of the major world regions, dealing with leading economic activities such as agriculture, forestry, fishing, mining, manufacturing, transportation, and trade.

GEOLOGY**51 Common Rocks and Minerals****1 hr. credit**

Designed primarily for amateur geologists and elementary teachers. Elementary study of physical properties of most common minerals, rocks, and ores as an aid in identifying them. Two hours a week of combined lecture and laboratory.

101 Physical Geology**4 hrs. credit**

The earth's features, treated with special reference to their origin and significance; agencies effecting changes in geographic features; physiographic changes in progress; effect of man's physical environment upon his distribution, habits, and occupations. Introductory study of common rocks and rock-forming minerals and interpretation of topographic maps. Three classroom periods and one two-hour laboratory period weekly, supplemented by field work.

102 Historical Geology**4 hrs. credit**

Prerequisite: Geol. 101. Fundamental problems involved in dynamical, structural, and historical geology. History of the earth studied from its origin to the present. The successive stages are followed in development of North America as a typical continent: formation of mountains, plains, and evolution of life of land and seas. Includes identification of fossils and interpretation of geologic maps. Three classroom periods and one two-hour laboratory period weekly, supplemented by field work.

153 Modern Prospecting**2 hrs. credit**

A study of modern instruments used in prospecting: Geiger counters, scintillation counters, ultra-violet light, metal detectors, and others. Also discussed: choice of counters, locations of radio-active minerals, examination of the major radioactive minerals. Field methods, United States Land Survey System, staking claims, and federal regulations.

HISTORY**101 Survey of Early Western Civilization****4 hrs. credit**

Political, social, economic, and cultural history of Europe from pre-historic times to beginning of the sixteenth century. Particular attention given to causes of the rise and fall of civilizations and their contributions to the modern world.

102 Survey of Later Western Civilization**4 hrs. credit**

Political, social, economic, and cultural history of Europe from the Reformation to the end of the nineteenth century. Particular attention given to colonial, national, and democratic movements and their influence on current events.

105 History of Michigan**2 hrs. credit**

History of Michigan from the time of first known human inhabitants through French and British domination, and finally American acquisition of Michigan as a territory and a state. Emphasis on Michigan history as a representative part of human culture.

151 The Bible as History**2 hrs. credit**

History of Judaism between 200 B.C. and 70 A.D. and survey of Jewish religious literature of that period. Furnishes foundation for appreciation of the Bible through an understanding of the life which produced and is reflected in it.

201 History of the United States to 1865**3 hrs. credit**

History of the United States from its immediate European backgrounds to the end of the Civil War. Some emphasis on social history and American international relations.

202 History of the United States from 1865 to the Present**3 hrs. credit**

A continuation of Hist. 201. United States History from the end of the Civil War to the present time. Some emphasis on social history and American international relations.

207 Russia Since 1900**2 hrs. credit**

Institutional, social, and economic developments within the Soviet Union since 1900; rise and death of Stalin and developments since 1953.

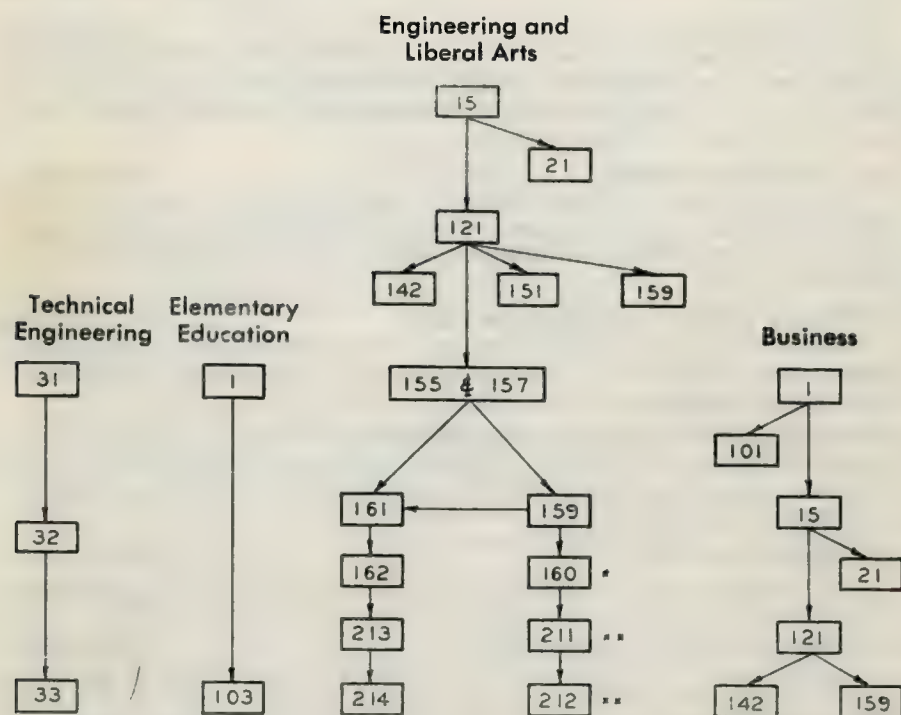
211 The Pacific-Indian Ocean Basin**4 hrs. credit**

Prerequisites: Hist. 102 or 202. A study of the countries touching the Pacific and Indian Oceans, their relations to each other and to the United States. Presents the geography of the area as a whole, followed by more detailed study of the recent history and the economic, social, and political situations of Asia, the Near East, South America, and the United States. Develops the relations of these areas with each other.

MATHEMATICS

SEQUENCES OF MATHEMATICS COURSES

The following charts indicate the sequences which are to be followed by mathematics students. The starting point in any sequence is determined by the student's high school record and the results of his college mathematics placement examination. When two course numbers are included in the same rectangle, they may be taken concurrently.



*Offered for the last time in the second semester of 1958-1959

**Offered for the last time in 1959-1960.

Some colleges and universities admit students who have had little preparation in high school mathematics. Elementary algebra and plane geometry are, however, essential for certain college courses. They are prerequisites in many degree curricula. Although deficiencies in mathematics may be removed at Junior College, time spent in so doing may require the student to attend Junior College one or more extra semesters.

Placement of students in mathematics courses depends not only upon the prerequisites for these courses but also upon satisfactory performance on a mathematics placement test.

1 Fundamentals of Arithmetic

1 hr. credit

Designed to meet the needs of students deficient in mathematics as shown by a mathematics placement test. Four fundamental operations on whole numbers, common and decimal fractions, percentage, applied problems.

15 Fundamentals of Algebra

5 hrs. credit

Algebra: four fundamental operations on monomials, polynomials, and fractions; linear equations; quadratic equations; systems of equations; mental multiplication and factoring; exponents and radicals.

21 Plane Geometry

5 hrs. credit

Prerequisite: Math. 15 or its equivalent. Angles, parallel lines, Pythagorean theorem, polygons, loci, circles, proportional line segments, similar polygons, areas.

31 Technical Mathematics

4 hrs. credit

Prerequisite: Math. 1 or its equivalent. Designed for the first semester in Technical Architecture and Technical Engineering curricula. Applications of arithmetic and plane and solid geometry, logarithms.

32 Technical Mathematics

4 hrs. credit

Prerequisite: Math. 31. Designed for the second semester in Technical Architecture and Technical Engineering curricula. Slide rule and applied problems, graphs, measuring instruments, practical algebra, geometric constructions, essentials of trigonometry, strength of materials, work and power, woodwork, tapers.

33 Technical Mathematics

4 hrs. credit

Prerequisite: Math. 32. Designed for the third semester in Technical Architecture and Technical Engineering curricula. Speed ratios of pulleys and gears, screw threads, cutting speed and feed, gears, milling machine work, belting.

101 Business Computation

3 hrs. credit

Prerequisite: Math. 1 or its equivalent. Combinations, special cases and short methods used in combinations; rapid calculation; various methods of proof in checking results; complex fractions and mixed numbers; decimals; percentage; interest; discount; logarithms; elements of statistics.

103 Basic Mathematics**3 hrs. credit**

Prerequisite: Math. 1 or its equivalent. Designed for elementary education candidates. Opportunity to remedy defects in the use of fundamental operations. Includes mathematics review and methods for elementary teaching. Topics studied are combinations, rapid calculation, mixed numbers, decimals, percentage, interest, discount, graphs, and statistics. Does not count toward mathematics major at senior colleges.

121 Intermediate Algebra**3 hrs. credit**

Prerequisites: Math. 15 or its equivalent; Math. 21 advisable. Fundamental processes, factoring, fractions, linear equations, quadratic equations, graphs, exponents, radicals, variations, proportion, logarithms.

142 Business Statistics**3 hrs. credit**

Prerequisite: Math. 121 or its equivalent. Elementary statistical concepts, frequency distribution, measures of central tendency, measures of variability, normal curve of distribution, sampling-error theory, time series, analysis of seasonal variation, and correlation theory.

151 Slide Rule**1 hr. credit**

Prerequisites: Math. 21 and 121 or their equivalents, with a knowledge of logarithms. For engineering students or those majoring in physics or chemistry. Consult instructor before purchasing slide rule.

155 Solid Euclidean Geometry**2 hrs. credit**

Prerequisites: Math. 21 and 121. Formulas, basic constructions and propositions, original exercises, mensuration.

157 Trigonometry**3 hrs. credit**

Prerequisites: Math. 21 and 121 or their equivalents. Radian measure, co-ordinate systems, trigonometric ratios, identities, equations, inverse functions, graphs, logarithms, reduction and addition formulas, solutions of right and oblique triangles, including areas.

159 College Algebra**3 hrs. credit**

Prerequisite: Math. 121. Review of exponents, radicals, quadratic equations; variations; proportion; systems of equations; complex numbers, theory of equations; determinants; inequalities.

160 Plane and Solid Analytic Geometry**4 hrs. credit**

This course offered for last time second semester 1958-1959.

161 Algebra, Analytic Geometry, and Calculus**4 hrs. credit**

Prerequisites: 1-1/2 years of high school algebra, 1 year of plane geometry, 1/2 year of trigonometry, 1/2 year of solid geometry or Math. 155 taken concurrently. Brief review of high school algebra; forms of equation of straight line, slope, parallel and perpendicular lines; conics, including degenerate cases; limits, derivatives; maxima and minima; differentials, increments; mean value theorem, definite integrals; fundamental theorem of calculus, computation of areas, volumes of revolution, and work; simple differential equations.

162 Algebra, Analytic Geometry, and Calculus**4 hrs. credit**

Prerequisite: Math. 161. General equation of second degree and its reduction to standard forms of conics; rotation of axes; synthetic division and remainder theorem; trigonometric, logarithmic, and exponential functions, and their derivatives; L'Hospital's rule, simple harmonic motion, Newton's method; integration by standard forms and by partial fractions; separable differential equations.

211 Calculus*5 hrs. credit**

Prerequisite: Math. 160. Functions and limits; continuity; derivative; differentiation of algebraic, transcendental, and hyperbolic functions; maxima and minima; related rates; curve tracing; rectilinear and curvilinear motion; indefinite and definite integrals; areas; volumes; length of arc; work; liquid pressure; centroids; moments of inertia.

212 Calculus*4 hrs. credit**

Prerequisite: Math. 211. Further methods of integration, improper integrals, indeterminate forms, Taylor's and Maclaurin's series, infinite series, partial derivatives, multiple integrals, introduction to differential equations.

* Offered for the last time in 1959-1960.

213 Algebra, Analytic Geometry, and Calculus**4 hrs. credit**

Prerequisite: Math. 162. Area of surfaces of revolution, arc length, and curvature; determinants, direction cosines, space curves; partial derivatives, total differentials, multiple integrals; cylindrical and spherical coordinates; moments and centroids; infinite series, tests for convergence; Taylor's formula, Euler's identity; surfaces, normal line, and tangent plane; hyperbolic functions.

214 Differential Equations, Statistics**4 hrs. credit**

Prerequisite: Math. 213. Differential equations, statistics, and selected topics.

MUSIC**101 Music Appreciation****3 hrs. credit**

Acquaints student with fundamentals of listening and with the musical classics.

111 Elements of Music**2 hrs. credit**

Planned to meet the needs of those in elementary education. Deals with rudiments of music, including notation, clefs, keys, syllables, and with teaching of rote songs.

141 A-B-C-D A Cappella Choir**1 hr. credit each semester**

Membership open to all Junior College students. Directed toward the study of representative choral music and public performances in college and community activities. May be taken for four semesters. 2 hrs. weekly.

151 - 152 - 251 - 252 Theory — Basic Musicianship. 3 hrs. credit each semester

Basic course for all students who plan to specialize in music. Develops basic musicianship, with special emphasis on aural history. An analysis of the style of Bach as found in the chorale harmonizations and a survey of the styles of Haydn, Mozart, and Beethoven. These are integrated courses and include in their content

- a. Correlation of aural, visual, and factual approaches.
- b. Tones and rhythms in perpendicular and horizontal relationships.
- c. Expression of musical ideas in elementary formal structure.

Specific procedures: lectures on acoustics, study of triads, intervals, sight-singing, and rhythmic reading. Emphasis on harmonic and melodic dictation.

NURSING

All nursing courses are open only to practical nursing students.

51 Nursing Skills Practice 5 hrs. credit

Basic principles of nursing care. Four hours of lecture and six hours of laboratory work weekly.

52 Diversional Activities 1 hr. credit

Designed to instruct students in methods of assisting patients through activities.

53 Vocational Relationships 1 hr. credit

Study of attitudes and reactions as related to the nursing profession.

55 First Aid 1 hr. credit

Standard Red Cross course in First Aid instruction.

56 Medical and Surgical Nursing 3 hrs. credit

Survey of nursing procedures in medical and surgical fields. Given at the hospital. Three hours weekly, sixteen weeks.

58 Obstetric and Pediatric Nursing 3 hrs. credit

Survey of nursing procedures in the obstetric and pediatric fields. Given at the hospital. Three hours weekly, sixteen weeks.

60 Nursing Laboratory 14 hrs. credit

Co-operative experience in nursing given at the hospital. Thirty-six hours weekly for thirty-two weeks. During this supervised period student earns a daily stipend.

NUTRITION**51 Family Nutrition and Homemaking 3 hrs. credit**

Open only to practical nursing students. A study of normal nutrition and of diet therapy.

PHILOSOPHY***210 History of Philosophy 3 hrs. credit**

Readings from selected philosophers which trace the evolution of philosophical thought from the Greeks through the 18th century.

***230 Logic 4 hrs. credit**

Aims to develop effective thinking through study of classical logic. For all students who desire an understanding of the basic concepts of thinking.

*To register, a student must possess a grade average of C (2.0).

PHYSICAL EDUCATION

Each first-year student is required to take two hours of physical education weekly. These two hours, for which one hour of credit is granted each semester, may consist of a combination of activities. Two credits of physical education are required to graduate from Junior College.

If a student has a physical disability which prevents his taking physical education, he must present a medical excuse to the Chairman of the Department.

Students wishing to transfer to other colleges upon graduation from Junior College should be sure that they have taken the physical education necessary to satisfy the requirements of the colleges to which they are transferring.

Veterans who have served ninety days or longer in the Armed Forces are excused from the graduation requirement of physical education. Their attention is called to the fact that certain colleges to which they may transfer require earned credits in physical education.

PHYSICAL EDUCATION — MEN**101 General Physical Education 1 hr. credit**

A variety of activities such as group games, tumbling and apparatus, touch football, basketball, volleyball, wrestling, and speed soccer

102 General Physical Education 1 hr. credit

Prerequisite: Phys. Ed. 101 A continuation of Phys. Ed. 101 with softball added.

103 Swimming 1 hr. credit

A combination of beginning and advanced swimming. Basic strokes are taught. Opportunity to learn many other aquatic skills, including fundamentals of water polo.

104 Swimming 1 hr. credit

A continuation of Phys. Ed. 103.

105 Touch Football, Soccer, Basketball, and Volleyball 1 hr. credit

Sports offered according to weather. Skills and rules involved in each game.

- 106 Basketball, Volleyball, and Track and Field** 1 hr. credit
Sports offered according to weather
- 111 Handball, Badminton, and Golf** 1 hr. credit
Sports offered according to weather
- 112 Handball, Badminton, and Golf** 1 hr. credit
A continuation of Phys. Ed. 111 Sports offered according to weather
- 201 Advanced General Physical Education** 1 hr. credit
Prerequisites: Any two of the following — Phys. Ed. 101, 102, 105, 106, 111, 112. Designed for those wishing a variety of activities such as group games, tumbling and apparatus, touch football, basketball, volley ball, and speed soccer Softball added in the spring.
- 202 Advanced General Physical Education** 1 hr. credit
A continuation of Phys. Ed. 201
- 203 Advanced Swimming** 1 hr. credit
Prerequisites: Phys. Ed. 103 and 104.
- 204 Advanced Swimming** 1 hr. credit
Prerequisites: Phys. Ed. 203. A continuation of Phys. Ed. 203.
- 205 Basketball, Volleyball, Touch Football, and Soccer** 1 hr. credit
Prerequisites: Any two of the following — Phys. Ed. 101, 102, 105, 106, 111, 112. Sports offered according to weather.
- 206 Basketball, Volleyball, Track, and Field** 1 hr. credit
Prerequisite: Phys. Ed. 205. Sports according to weather.
- 211 Handball, Badminton, and Golf** 1 hr. credit
Prerequisites: Any two of the following — Phys. Ed. 101, 102, 105, 106, 111, 112. Sports according to weather
- 212 Handball, Badminton, and Golf** 1 hr. credit
Prerequisite: Phys. Ed. 211 A continuation of Phys. Ed. 211. Sports according to weather

PHYSICAL EDUCATION — WOMEN

- 101 General Physical Education** 1 hr. credit
A variety of activities such as basketball, volleyball, table tennis, and other group games. Special emphasis on carry-over sports such as golf, tennis, and badminton.
- 102 General Physical Education** 1 hr. credit
A continuation of Phys. Ed. 101. Softball added in the spring.
- 103 Swimming** 1 hr. credit
A program set up for beginning, intermediate, and advanced swimmers.
- 104 Swimming** 1 hr. credit
A continuation of Phys. Ed. 103.

- 111 Carry-Over Activities** 1 hr. credit
Fundamentals of table tennis, archery, golf, tennis, badminton, and volleyball.
- 112 Carry-Over Activities** 1 hr. credit
A continuation of Phys. Ed. 111
- 117 Modern Dance** 1 hr. credit
Designed to teach the fundamental movements of modern dancing.
- 118 Modern Dance** 1 hr. credit
A continuation of Phys. Ed. 117. Women having had private lessons but not 117 may take the course with the instructor's permission. Designed to teach the more difficult movements of the dance and interpretation of dance movements.
- 201 Advanced General Physical Education** 1 hr. credit
Prerequisites: Phys. Ed. 101 and 102. A continuation of Phys. Ed. 101 and 102. Should be elected by women who are physical education majors or who are transferring to institutions requiring more than two semesters of physical education.
- 202 Advanced General Physical Education** 1 hr. credit
Prerequisite: Phys. Ed. 201
- 203 Advanced Swimming** 1 hr. credit
Prerequisites: Phys. Ed. 103 and 104. Designed for those specializing in physical education or working for summer life-saving positions.
- 204 Advanced Swimming** 1 hr. credit
Prerequisite: Phys. Ed. 203. Designed for those students electing four semesters of swimming.

PHYSICAL EDUCATION — CO-EDUCATIONAL

- 113 Carry-Over Activities** 1 hr. credit
A variety of games including table tennis, archery, golf, tennis, badminton, and volley ball.
- 114 Carry-Over Activities** 1 hr. credit
A continuation of Phys. Ed. 113.
- 116 Social Dancing** 1 hr. credit
Square as well as social dancing.

PHYSICS

- 1 Elementary Physics** 4 hrs. credit
Prerequisites: Math. 15 and 21 or equivalents in high school mathematics. By special permission, one of these may be taken with Physics 1. General course in elementary physics for students entering without high school physics. 4 hrs. weekly.

101 General Physics 4 hrs. credit

Prerequisites: Physics 1 or high school physics; Math. 21 and 121 or equivalents in high school mathematics. Trigonometry is desirable. By special permission, the requirement of high school physics may be waived for students having trigonometry and a scholastic average of B (3.0) or better. Deals with mechanics, heat, and sound. Four hours of lecture and quiz and three hours of laboratory weekly.

102 General Physics 4 hrs. credit

Prerequisite: Physics 101. A continuation of Physics 101. Covers magnetism, electricity, and light. Four hours of lecture and quiz and three hours of laboratory weekly.

201 General Physics 5 hrs. credit

Prerequisite: High school physics or its equivalent; Math. 157 and 161. By permission, the latter may be taken as a parallel course. Covers the same general topics as Physics 101 but adapted to meet needs of engineering students. Many quantitative relationships more fully developed and applied to solution of additional problems. Five hours of lecture and quiz and three hours of laboratory weekly.

202 General Physics 5 hrs. credit

Prerequisite: Physics 201. A continuation of Physics 201. Covers magnetism, electricity, and light with same distribution of hours.

205 Engineering Mechanics, Statics 3 hrs. credit

Prerequisites: Physics 201 and Math. 213. Math. 213 may be taken as parallel course. Covers forces, components, vectors, moments, couples, methods of sections, stress in frame structures analytically and graphically, cables, friction, centroids, shear and bending moments.

210 Engineering Mechanics, Statics, and Dynamics 5 hrs. credit

Prerequisites: Same as for Physics 205. Covers forces, components, vectors, moments, couples, method of sections, stress in frame structures, cables, centroids, kinematics of particles and rigid bodies, the motions of particles and bodies, translation, rotation, plane motion, work and energy, impulse and momentum, mechanical vibrations.

PHYSIOLOGY AND HYGIENE**51 The Body in Health** 2 hrs. credit

For practical nursing students only. A study of the body in health.

53 The Body in Disease 2 hrs. credit

For practical nursing students only. A study of the body in disease.

101 Physiology and Hygiene 4 hrs. credit

Introduction to personal and community health, knowledge of which will enable the student more adequately to meet health responsibilities in home, place of employment, school, and community.

103 Physiology 4 hrs. credit

Introduction to mechanism of the human body and its normal functioning. Adapted to meet the needs of the medical secretary, medical technologist, dental hygienist, nurse, pre-mortuary and liberal arts student. Not to be taken by pre-dental, pre-medical, or pre-pharmacy students.

POLITICAL SCIENCE**101 American Government** 4 hrs. credit

Organization and functioning of the political, electoral, legislative, administrative, and judicial processes of the Federal Government.

102 American Government 3 hrs. credit

A continuation of Polit. Sci. 101. Development, organization, and problems of state and local government, with their relation to federal administrative agencies.

103 American Government 3 hrs. credit

Not open to students who have credit in Polit. Sci. 101 or 102. Organization and functioning of the political, electoral, legislative, administrative, and judicial process of both federal and state governments.

201 Comparative Government 3 hrs. credit

Prerequisite: A college course in political science or history. Deals principally with governments of Great Britain, France, Soviet Russia, and Spain, with some reference to governments of Sweden and South American countries. Emphasis on theories of democracy, fascism, communism, and socialism.

203 International Politics 3 hrs. credit

Prerequisite: A college course in political science or history. Introduction to the study of politics among nations, designed to provide a working knowledge of concepts necessary to understanding current world affairs such as the state system, colonialism, imperialism, and regional arrangements. Includes a survey of international organizations.

205 American Political Parties 2 hrs. credit

Prerequisite: A college course in political science or United States history. History, organization, structure, and functions of political parties of the United States; use of public opinion by political parties; election results, pressure groups, and pressure politics; governmental regulation of political parties and conduct of elections.

207 Russia Since 1900 2 hrs. credit

Institutional, social, and economic developments within the Soviet Union since 1900; rise and death of Stalin and developments since 1953.

PSYCHOLOGY**201 General Psychology****4 hrs. credit**

Open to sophomores; also to second semester freshmen with a high C or better average. Introduction to general psychology. Principles underlying experience and behavior, designed to give an understanding of human behavior as affected by learning, motivation, emotion, intelligence, perception, personality, and interpersonal relationships.

202 Child Psychology**3 hrs. credit**

Prerequisite: Psychology 201 Facts and generalizations concerning growth of children from birth to school age. The child considered as a whole. Deals with physical, mental, social, and emotional development.

203 Psychology of Personality**3 hrs. credit**

Prerequisite: Psych. 201 Concepts of personality: the uniqueness of personality, factors in the development of personality, the methods of measuring personality, and some origins and nature of mental and emotional maladjustments.

RELIGION**151 Historical Sketch of Bible****2 hrs. credit**

Development of our English Bible, with some thought given to outstanding characters of the Bible. History, authorship, and outline of each book in both Old Testament and New Testament. Word study of special Hebrew and Greek words and their significance, with concluding study of theological terms.

152 Historical Sketch of Bible**2 hrs. credit**

A continuation of Religion 151

SHOP**1 Auto Mechanics****1 hr. credit**

Theory of repair and maintenance of internal combustion engines. Work experience in the shop on mechanical and electrical repairs and adjustments with the use of testing equipment on compression, ignition, and carburetion. 3 hrs. weekly.

2 Auto Mechanics**1 hr. credit**

Similar to Shop 1 with more emphasis on practical aspects of automotive tune-up. 3 hrs. weekly.

5 Welding — Arc**1 hr. credit**

Consideration given to modern welding practice, including ferrous and non-ferrous metals and alloys; electric welding and cutting. 3 hrs. weekly.

6 Welding — Gas**1 hr. credit**

Similar to Shop 5 with the use of oxy-acetylene welding. 3 hrs. weekly.

8 Machine Shop**1 hr. credit**

Shaping of metals by cutting. Laboratory work includes practice with bench tools, lathes, planers, shapers, milling machines, and drill presses. Develops skill in fundamentals of machine work. 3 hrs. weekly.

9 Machine Shop**1 hr. credit**

A continuation of Shop 8. 3 hrs. weekly.

13, 14 Shop Technology**2 hrs. credit each semester**

Consists of technical information for the purpose of upgrading individuals employed as machine operators. Covers arithmetic, algebra, fundamentals of mechanical drafting, blue print reading, and machine sketching.

15, 16 Shop Technology**2 hrs. credit each semester**

Prerequisites: Shop 13 and 14. Advanced problems for the upgrading of employed machine operator Stresses geometry, trigonometry, applied physics, and metallurgy.

17, 18 Machine Shop Practice**2 hrs. credit each semester**

Practical course in operation of the lathe, shaper, milling machine, drill press, grinder, planer, and bench tools. Designed to broaden the experiences of machine operator already employed in the trade. Applicants must register with the Vocational Department of the Bay City Public Schools.

21, 22; 23, 24; 25, 26 Auto Mechanics**3 hrs. credit each semester**

Applicant must be indentured as an apprentice auto mechanic and must register with the Vocational Department of the Bay City Public Schools. Designed to cover related information required by apprenticeship standards of the automobile mechanic. Employer-employee relations and safety stressed in addition to general automobile theory, shop mathematics, automotive electricity, carburetion, lubrication, and inspection.

31, 32; 33, 34; 35, 36 Bricklaying**3 hrs. credit each semester**

A three-year sequence.

41, 42; 43, 44; 45, 46 Carpentry**3 hrs. credit each semester**

A four-year sequence.

51, 52; 53, 54; 55, 56 Electricity**3 hrs. credit each semester**

A four-year sequence.

61, 62; 63, 64; 65, 66 Iron Working**3 hrs. credit each semester**

A three-year sequence.

71, 72; 73, 74; 75, 76 Plumbing**3 hrs. credit each semester**

A five-year sequence.

81, 82; 83, 84; 85, 86 Sheet Metal Working**3 hrs. credit each semester**

A four-year sequence.

91, 92, 93, 94; 95, 96 Machinist Apprenticeship**3 hrs. credit each semester**

A three or four-year sequence

101, 102, 103, 104; 105, 106 Tool and Die **3 hrs. credit each semester**

A four-year sequence.

Shop Courses 21-106 offer related instruction required in their respective trades as outlined in the apprenticeship standards for each trade. Administration is subject to selection and trade placement by a Joint Apprenticeship Committee of each trade, which governs the policies of its training program. Open only through the Joint Apprenticeship Committee. Applicants must register with the Vocational Department of the Bay City Public Schools.

111 Shop Practice**2 hrs. credit**

Designed for students interested in the study of machines, hand tools, and machine tools pertaining to machine shop. Also for those who wish to become proficient in manipulating various machines such as the lathe, milling machines, shaper, planer, tool cutter, grinder, and drill press. Scope and trend of modern shop practice and machines used as a basis for class discussion. One recitation and one three-hour laboratory period weekly.

SOCIOLOGY**51 Family Relationships** **2 hrs. credit**

For practical nursing students. Family relationships, vocational relationships, and diversional activities.

201 Principles of Sociology **3 hrs. credit**

Introduction to scientific study of human relationship and institutions. Includes evaluation of current literature as a reflection of man's culture. Basic for all courses in social work.

202 Social Problems **3 hrs. credit**

Prerequisite: Sociol. 201 or Psych. 201 The causes and solutions of such social problems as the changing role of the family, new concept of security, population changes, physical and mental health, juvenile delinquency, crime, and race problems.

SPEECH**101 Fundamentals of Speech for Engineering Students** **1 hr. credit**

For students in engineering and scientific fields only. Training in public speaking. Frequent speaking assignments and rigorous outlining procedure. Impromptu, extemporaneous, manuscript, and report speeches.

102 Engineering and Scientific Speech **2 hrs. credit**

Prerequisite: Speech 101 For students in engineering and scientific fields only. Semi-technical, expository speeches, illustrated with blue prints, charts, graphs, scientific apparatus, machine tools, and parts of the machine itself. Outlining.

125 Principles of Public Speaking **3 hrs. credit**

A beginning course in practical problems of speaking before an audience. Speaking assignments include impromptu, extemporaneous, and manuscript methods of delivery. Emphasis on extemporaneous speaking and rigorous outlining and organizational procedure.

221 Speechmaking **3 hrs. credit**

Survey of all forms of collegiate speech. Includes the theory of speech; frequent platform experience. Attention given to radio and television speaking procedure. All speaking assignments outlined and personal and social communication stressed.

222 Interpretative Speech **3 hrs. credit**

A previous speech course is recommended. Phonetics and voice culture studied to enable students to interpret good literature and to project personality over stage and radio. Introduction to elements of voice and diction. A survey of semantics examines language.

223 Discussion in Human Affairs **2 hrs. credit**

Prerequisite: A previous speech course. Designed to explain discussion as a means to better understanding and action in human affairs and to develop attitudes and skills which enable people to participate in discussion competently. A practical course in actual field work in the off-campus speaking situation. Study of group leadership.

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BAY CITY

JUNIOR COLLEGE